CDX-5N15W

SERVICE MANUAL

US Model

COMPACT disc DIGITAL AUDIO

CD Drive Mechanism Type	MG-200M-33

SPECIFICATIONS

Laser Diode Properties
Material : GaAlAs
Wavelength : 780 nm
Emission duration : Continuous
Laser output power : Less than 44.6μW*
* This output is the value measured at a distance of 200 mm from the objective lens surface on the Optical Pick-up Block.

Frequency response
4 – 20,000 Hz
±3.0 dB

Harmonic distortion
0.01 % (1 kHz)

Dynamic range
85 dB (1 kHz)

Wow and flutter
Below measurable limit

Signal-to-noise ratio
85 dB (1 kHz)

Power requirements
13.2 V (10.8 – 15.6 V) car battery, Negative ground

Current drain Less than 3 A

Dimensions Approx. 180 × 50 × 160 mm ($7^1/_8 \times 2 \times 6^3/_8$ in.) (w/h/d)

Weight Approx. 1.3 kg (2 lb 14 oz)

Design and specifications subject to change without notice.

GENUINE NISSAN PARTS

PART NUMBER B8182 C9971

COMPACT DISC PLAYER

SONY®

使用時は添付資料も参照のこと
Refer to the additional documents.

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SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

SERVICING NOTE

1) Flexible Circuit Board Repairing

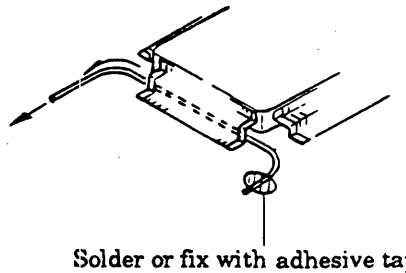
- Keep the temperature of the soldering iron around 270°C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

Notes on chip component replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

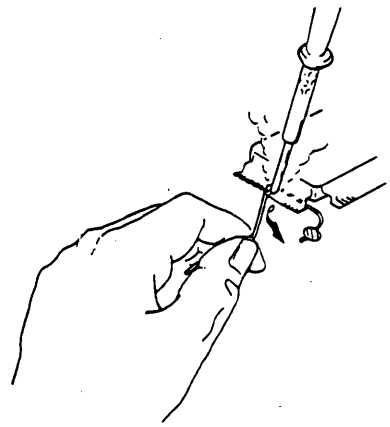
2) Removing the Flat Package IC

1. Prepare an enameled wire (0.3mm diameter) and apply it to the back side of the IC pins as illustrated below.



Solder or fix with adhesive tape.

2. Heat the IC pin with the soldering iron and draw the enameled wire so that the IC pin is removed from the pattern as illustrated.



SECTION 1
SERVICING NOTES

Laser Diode Properties

- Material: GaAlAs
- Wavelength: 780 mm
- Emission Duration: continuous
- Laser Output Power: less than 44.6 μW*

  * This output is the value measured at a distance of 200 mm from the objective lens surface on the Optical Pick-up Block.

CAUTION

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

During service, do not take the Optical Pick-up Block apart, and do not adjust the APC circuit. If there is a breakdown in the APC circuit (including laser diode), replace the entire Optical Pick-up Block (including APC board).

NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

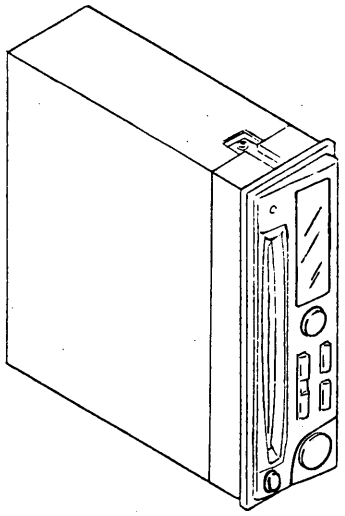
The laser diode in the optical pick-up block may suffer electrostatic breakdown because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body.

During repair, pay attention to electrostatic breakdown and also use the procedure in the printed matter which is included in the repair parts.

The flexible board is easily damaged and should be handled with care.

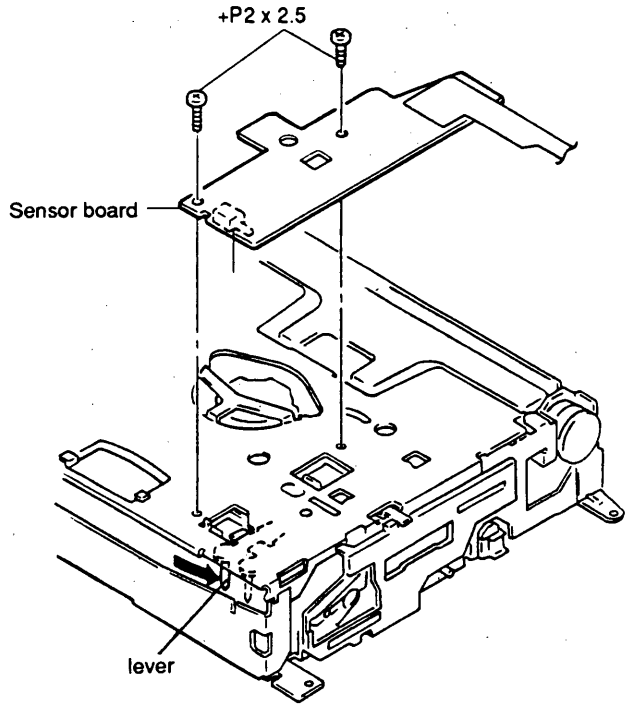
Cautions for Repair

- Never reverse the set when inserting or removing the disc.
  When checking the boards, put the set as illustrated below.

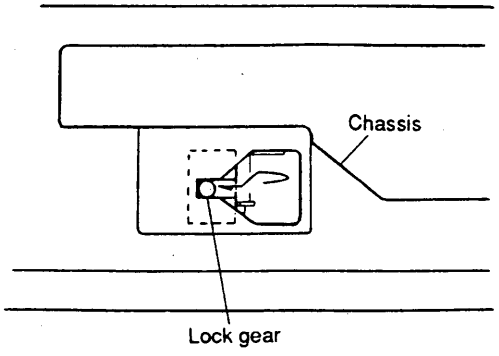


Note for reassembling

When reassembling SENSOR BOARD place the board with keeping the lever pressed in the direction of arrow. If attach it forcibly, the switch way be broken.

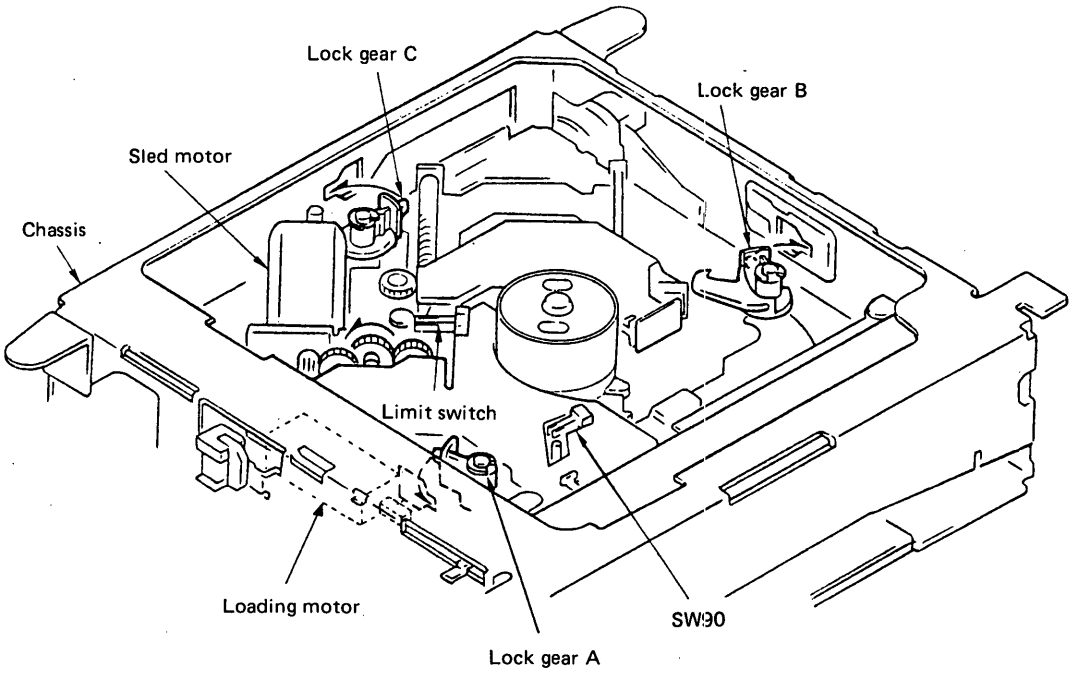


- In play mode, the disc section is connected to the chassis section only through the damper so that it is not affected by vibration.
  The lock gear is fixed in the notch of the chassis only in STOP mode.
  If the lock gear is not firmly fixed in the notch, the disc cannot be removed or inserted. In such a case, rotate the gear near the sled motor by your fingers to fix the lock gear in the notch.



SECTION 2
CIRCUIT DESCRIPTION

When the optical section moved toward the inner circumference and the limit switch is turned on, the sled motor starts to rotate the gear in the direction of the arrow and the MD section is fixed to the chassis.
When the lock gear is fixed to the chassis, SW90 is turned on. When SW90 is turned on, the loading motor is rotated to eject the disc.



OPERATION MODE TRANSITION TABLE

How to View the Table

[Example] When the APS button (⏮ button) is pressed during RANDOM PLAY,
PLAYS from the head of the song .

Condition \ Operation		PLAY/STOP	⏮ APS	⏭ APS	◁◁ REV	▷▷ CUE	RPT	EJECT	ACC OFF → ACC ON	DISC IN	COMB ON → COMB OFF	DISC TOP	DISC END
ACC ON	DISC IN: PLAY (RPT OFF)	STOP	PLAY after song selection *2	PLAY after song selection *1	Fast-rewind *4	Fast-forward *4	ALL→1RPT→OFF→RAN	EJECT	Standby	PLAY		STOP	STOP		STOP (1st song standby)
	DISC IN: STOP	PLAY	×	×	×	×	×	↑	STOP	STOP		↑	↑		
	DISC IN: During EJECT	PLAY after loading	↑	↑	↑	↑	↑	↑	EJECT	EJECT		EJECT	EJECT		
	DISC IN: During Loading	STOP after loading	↑	↑	↑	↑	↑	EJECT after loading	Standby after loading	PLAY after loading		STOP after loading	STOP after loading		
	DISC IN: During APS ⏮	×		↑	↑	↑	↑	×	Standby	PLAY after APS succession		STOP	STOP	APS succession	APS succession
	DISC IN: During APS ⏭	↑	×		↑	↑	↑	↑	↑	↑		↑	↑	↑	↑
	DISC IN: During REV ◁◁	↑	↑	×		↑	↑	↑	↑	PLAY		↑	↑	PLAY from 1st song	
	DISC IN: During CUE ▷▷	↑	↑	↑	×		↑	↑	↑	↑		↑	↑		PLAY *7
	DISC IN: During COMB ON	PLAY	↑	↑	↑	×	↑	EJECT	COMB Standby	COMB ON			↑		
	DISC IN: DISC ENC Standby	1st song PLAY	↑	↑	↑	↑	↑	↑	Standby	STOP		STOP	↑		
	DISC IN: RANDOM PLAY	STOP	PLAY from the head of the song	PLAY after detection of next song	Returns to the head of the song, and PLAY	Fast-forward *5	Repeat OFF	↑	↑	RANDOM PLAY		↑	↑	RANDOM PLAY	RANDOM PLAY
	DISC IN: 1 RPT PLAY	↑	PLAY after song selection *2	PLAY after song selection *1	↑	↑ *3	RANDOM PLAY	↑	↑	1 RPT PLAY		↑	↑	1 RPT PLAY	PLAY from last song
	DISC IN: ALL RPT PLAY	↑	↑	↑	↑ *4	↑ *4	1 RPT PLAY	↑	↑	ALL RPT PLAY		↑	↑	ALL RPT PLAY	PLAY from 1st song
	DISC IN: During self-store loading *6	PLAY	×	×	×	×	×	EJECT after loading	STOP after self-store	STOP after self-store		STOP after self-store	STOP after self-store		
	DISC OUT	×	↑	↑	↑	↑	↑	× (EJ motor ON)		OFF	PLAY after loading				
ACC OFF	DISC IN	↑	↑	↑	↑	↑	↑	EJECT		PLAY or STOP *8					
	DISC OUT	↑	↑	↑	↑	↑	↑	× (EJ motor ON)		OFF	Standby after loading				

*1: PLAYS from the head of the next song when pressed once.
Songs are selected from 1→2→3.....N→1→2 when pressed more than twice or continuously.

*2: PLAYS from the head of the present song when pressed once.
Songs are selected from 3→2→1.....N→N→1 when pressed more than twice or continuously.

*3: Goes to the head of the song and PLAYS.

*4: PLAYS from the first song after going to its head.

*5: CUE until the next song, and PLAYS.

*6: When neglected after EJECT, performs loading once again, and sets into the STOP condition.

*7: PLAYS from the track corresponding to the RPT mode.

*8: Returns to the condition before ACC OFF.

IC3 PINS (CXD1167Q)

Pin No.	Signal	I/O	Description
1	FSW	O	Output time constant transfer.
2	MON	O	ON/OFF Control output.
3	MDP	O	Output drive of spindle motor.
4	MDS	O	Output drive of spindle motor.
5	EFM	I	Input the EFM signal from RF amplifier.
6	ASY	O	Control the slice level of EFM signal for output.
7	LOCK	O	"H" is H output, "L" is L output.
8	VCOO	O	Output VCO.
9	VCOI	I	Input VCO.
10	TEST	I	(0 V)
11	PDO	O	Phase compare output.
12	VSS	–	GND (0 V)
13	CLK	I	Data latch/Clock input from CPU.
14	XLT	I	Input the latch from CPU.
15	DATA	I	Serial data input from CPU.
16	XRST	I	System reset input.
17	CNIN	I	Input the tracking pulse.
18	SENS	O	N.C
19	MUTG	I	Muting input.
20	CRCF	O	Subcode Q signal output.
21	EXCK	I	Clock input for subcode serial output.
22	SBSO	O	Subcode serial output.
23	SUBQ	O	Subcode Q signal output.
24	SCOR	O	Subcode sync S0+S1 signal output.
25	SQCK	I/O	Subcode Q signal clock.
26	SQEX	I	Selective output of SQCK.
27	DOTX	O	Digital out output.
28	GFS	O	Display output.
29	TEST	I	"H" or "L".
30	TEST	I	"H" or "L".
31	TEST	I	"H" or "L".
32	TEST	I	"H" or "L".
33	VDD	–	POWER (+5 V)
34	TEST	I	"H" or "L".
35	TEST	I	"H" or "L".
36	TEST	I	"H" or "L".
37	TEST	I	"H" or "L".
38	TEST	I	"H" or "L".
39	TEST	I	"H" or "L".
40	TEST	I	"H" or "L".
41	TEST	I	"H" or "L".

Pin No.	Signal	I/O	Description
42	TEST	I	"H" or "L".
43	TEST	I	"H" or "L".
44	TEST	I	"H" or "L".
45	TEST	I	"H" or "L".
46	TEST	I	"H" or "L".
47	TEST	I	"H" or "L".
48	TEST	I	"H" or "L".
49	TEST	I	"H" or "L".
50	TEST	I	"H" or "L".
51	C4M	O	X'tal. f = 4.2336 MHz
52	VSS	–	GND (0 V)
53	XTAI	I	X'tal oscillate input. f = 8.4672 MHz or 16.9344 MHz
54	XTAO	O	X'tal oscillate output. f = 8.4672 MHz or 16.9344 MHz
55	MD1	I	Mode select input 1.
56	MD2	I	Mode select input 2.
57	MD3	I	Mode select input 3.
58	SLOB	I	Code change input of audio data output.
59	PSSL	I	Mode change input of audio data output.
60	APTR	O	Aperture control output. R-ch: "H".
61	APTL	O	Aperture control output. L-ch: "H".
62	DA01	O	PSSL = "H": DA01 output. PSSL = "L": C1F1 output.
63	DA02	O	PSSL = "H": DA02 output. PSSL = "L": C1F2 output.
64	DA03	O	PSSL = "H": DA03 output. PSSL = "L": C2F1 output.
65	DA04	O	PSSL = "H": DA04 output. PSSL = "L": C2F2 input.
66	DA05	O	PSSL = "H": DA05 output. PSSL = "L": C2FL input.
67	DA06	O	PSSL = "H": DA06 output. PSSL = "L": C2PO input.
68	DA07	O	PSSL = "H": DA07 output. PSSL = "L": RFCK input.
69	DA08	O	PSSL = "H": DA08 output. PSSL = "L": WFCK input.
70	DA09	O	PSSL = "H": DA09 output. PSSL = "L": $\overline{\text{PLCK}}$ input.
71	DA10	O	PSSL = "H": DA10 output. PSSL = "L": UGFS input.
72	DA11	O	PSSL = "H": DA11 output. PSSL = "L": GTOP input.
73	VDD	–	POWER (+5 V)
74	DA12	O	PSSL = "H": DA12 output. PSSL = "L": RAOV output.
75	DA13	O	PSSL = "H": DA13 output. PSSL = "L": C4LR output.
76	DA14	O	PSSL = "H": DA14 output. PSSL = "L": BCLK output.
77	DA15	O	PSSL = "H": DA15 output. PSSL = "L": $\overline{\text{BCLK}}$ output.
78	DA16	O	PSSL = "H": DA16 output. PSSL = "L": DATA output.
79	WDCK	O	Strobe signal output. DF ON: 176.4 kHz, DF OFF: 88.2 kHz
80	LRCK	O	Strobe signal output. DF ON: 88.2 kHz, DF OFF: 44.1 kHz

IC301 PINS (μPD75512GF-139-3B9)

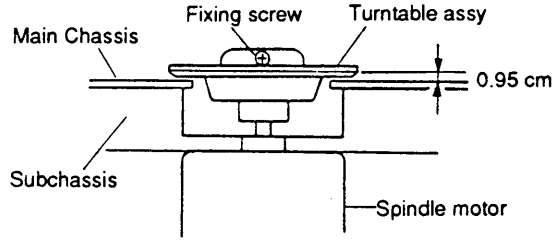
Pin No.	Pin Name	I/O	Signal	Description
1	ANO	I	AO	FL luminance signal control.
2	AVREF	I	VREF	REF voltage (+5 V) for ADC.
3	VDD	–	VDD	+B power supply pin (BACK UP).
4	VPP	–	VPP	
5	P113	O	LO+	Loading Motor Control.
6	P112	O	LO–	
7	P111	O	PL	Planger Control.
8	P110	O	8CM	8 cm disc gain control.
9	P103	I	LD ON	Laser Diode ON/OFF control.
10	P102	I	D·MUTE	DIGITAL MUTE.
11	P101	O	–	N·C
12	P100	–	XRST	CD reset.
13	P93	O	MUTE	Audio sig MUTE.
14	P92	O	$\overline{\text{INH}}$	FL data INH.
15	P91	O	–	N·C
16	P90	O	LCDCE	FL chip enable.
17	P83/S11	I	–	N·C
18	P82/S01	O	LCD DATA	FL DATA OUT.
19	P81/$\overline{\text{SCK1}}$	O	LCD CLK	FL CLOCK.
20	P80/PP0	O	–	N·C
21	P73/KR7	I	K13	Key Matrix IN.
22	P72/KR6	I	K12	
23	P71/KR5	I	K11	
24	P70/KR4	I	K10	
25	P63/KR3	O	K07	Key Matrix OUT.
26	P62/KR2	O	K06	
27	P61/KR1	O	–	
28	P60/KR0	O	–	
29	P53	O	K03	
30	P52	O	–	
31	P51	O	–	
32	P50	O	KO0	
33	GND	–	GND	GND.
34	P43	O	–	N·C
35	P42	O	–	
36	P41	I/O	SQCK	Subcode Q signal CLOCK.
37	P40	O	–	N·C
38	P33/MD3	I	SUBQ	Subcode Q signal input.
39	P32/MD2	I	E SW	MD ESW IN.
40	P31/MD1	O	–	N·C
41	P30/MD0	O	–	

Pin No.	Pin Name	I/O	Signal	Description
42	P23/BUZ	O	–	Not used.
43	P22/PCL	O	DISC IND	DISC indicator.
44	P21	O	P·ON	Power ON.
45	P20/PTO0	O	–	N·C
46	P13/T10	I	ILL CON IN	ILL CONTROL IN.
47	P12/INT2	I	C SW	MD C SW IN.
48	P11/INT1	I	EJECT	EJECT detection.
49	P10/INT0	I	SCOR	Subcode sync S0+S1 signal input.
50	P03/S10/SB1	I	–	N·C
51	P02/SO0/SB0	I	–	
52	P01/$\overline{SCK\ 0}$	I	–	
53	P00/INT 4	I	ACC C	ACC check.
54	GND	–	GND	GND.
55	XT1	I	XT1	GND.
56	XT2	–	XT2	N·C
57	IC	–	I.C.	GND.
58	X1	I	X1	X'TAL OSC input (Positive).
59	X2	I	X2	X'TAL OSC input (Negative).
60	$\overline{RESET}$	I	$\overline{RST}$	System RESET.
61	P143	O	–	N·C
62	P142	O	–	
63	P141	O	–	
64	P140	O	REM OUT	Outside of RADIO OFF OUT (REM OUT).
65	P133	I	–	N·C
66	P132	–	–	
67	P131	I	REM IN	Outside of RADIO ON (REM IN).
68	P130	I	D SW	MD D SW IN.
69	P123	O	EMPH	EMPHA switching.
70	P122	O	CD CLK	CD player CLK.
71	P121	O	XRT	LATCH OUT.
72	P120	I	CD DATA	CD data IN.
73	AGND	–	AGND	GND.
74	P153/AN7	I	B SW	MD B SW IN.
75	P152/AN6	I	GFS	Detection output for frame sync by lock condition.
76	P151/AN5	I	SENS	Condition of inside ADDRESS, IN.
77	P150/AN4	I	F OK	FOCUS OK.
78	AN3	I	–	N·C
79	AN2	I	–	
80	AN1	I	B CHK	BATT check IN.

SECTION 3
MECHANICAL ADJUSTMENTS

Turntable Height Adjustment

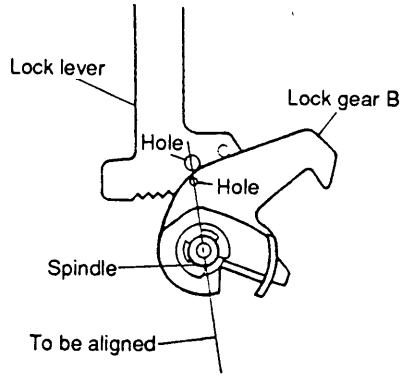
Loosen the fixing screws and adjust the height to the specification illustrated.



Lock Gears (A and B) Installing Adjustment

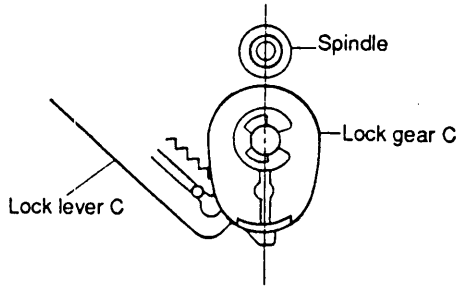
Since installing lock gears A and B is the same, only lock gear B is described below.

1. Rotate the gear near the motor with your fingers to move the optical section toward the external circumference.
2. Continue to rotate the gear until the lock gear is disconnected from the notch of the chassis and stops.
3. Fix the lock gear so that the holes of the lock lever and the lock gear and the spindle are roughly aligned.



Lock Gear C installing Position Adjustment

1. Rotate the gear near the motor and move the optical section toward the external circumference.
2. Continue to rotate the gear until the lock gear is disconnected from the notch of the chassis and stops.
3. Fix lock gear C so that the spindle, the lock gear C fixing axis and the center of the lock gear C projection are roughly aligned.



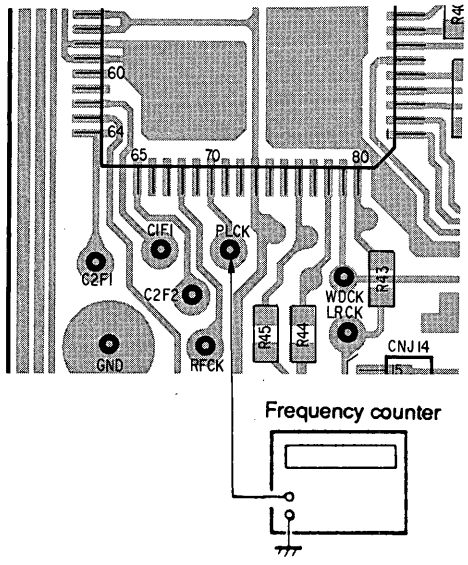
SECTION 4
ELECTRICAL ADJUSTMENTS

PLL free-run frequency adjustment

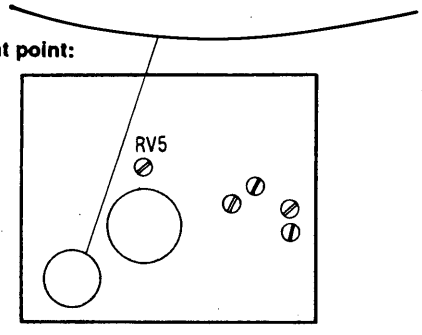
Adjustment:

1. Connect the frequency counter to test point (PLCK).
2. Turn the power on and adjust RV5 so that frequency counter reading satisfies the specification.

Adjustable limits: 4.3118 to 4.3318MHz



Adjustment point:

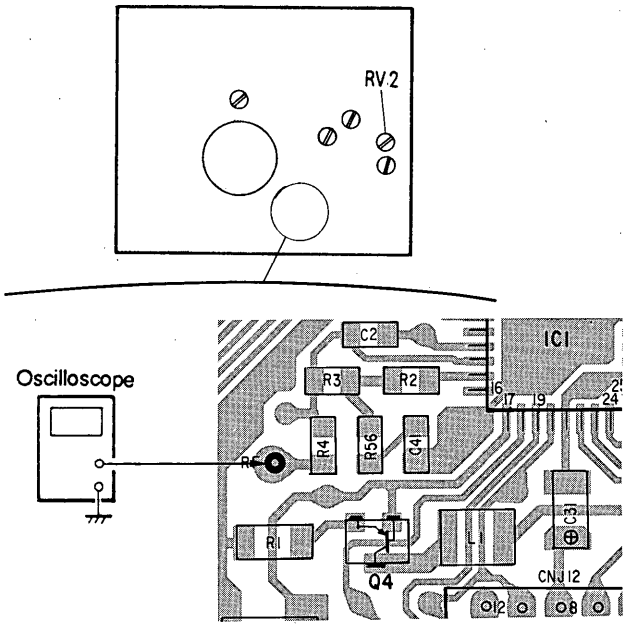


Focus offset adjustment

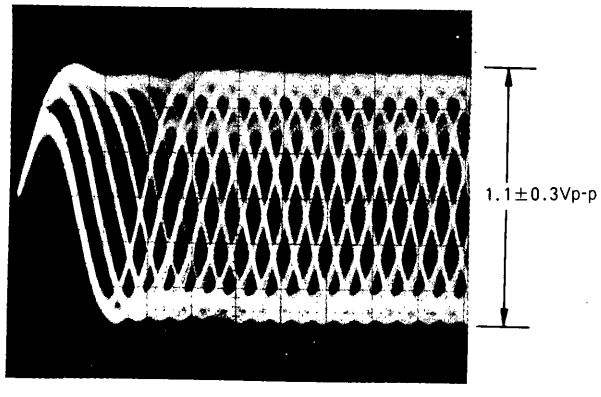
Adjustment:

1. Connect the oscilloscope to test point RF on the MD main board.
2. Load a disc and set mode to PLAY.
3. Adjust RV2 so that the waveform on the oscilloscope (eye pattern) is maximum with good shape. "Well-shaped eye pattern" means that the mark " ◇ " is clearly distinguished at the center of the waveform.

Adjustment point: MD main board



Volt/div: 200mV
Time/div: 0.5μsec

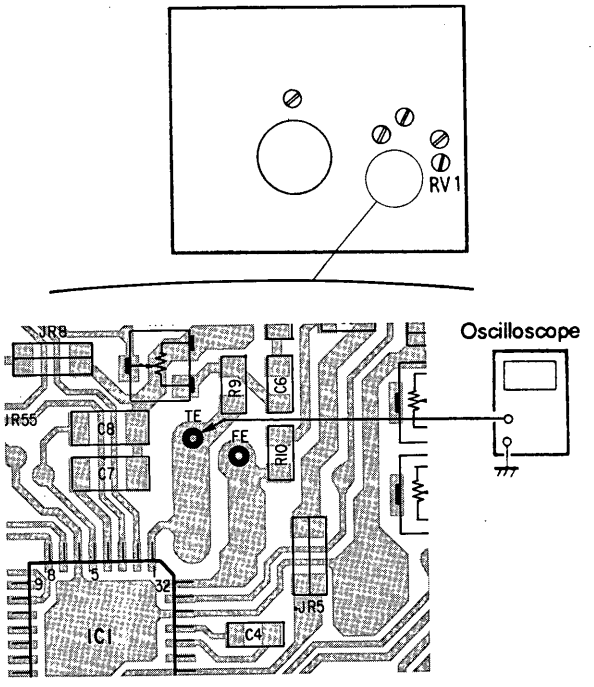


Tracking offset adjustment

Adjustment:

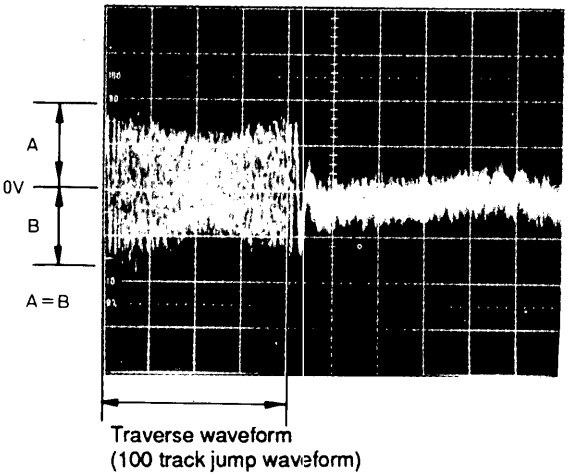
1. Connect the oscilloscope to test point TE on the MD main board.
2. Load a disc and set mode to PLAY.
3. Press button ⏮ or ⏭ (◀◀ or ▶▶) and observe the traverse waveform.
4. Adjust RV1 so that the waveform is symmetric when cenetered at the level to be accessed.

Adjustment point: MD main board



* Traverse waveform: Tracking error waveform which is observed when the track is traversed.

Volt/div: 0.5V
Time/div: 2msec
Center 0V



Tracking gain adjustment (Coarse adjustment)

This adjustment is not required unless the following parts are replaced:

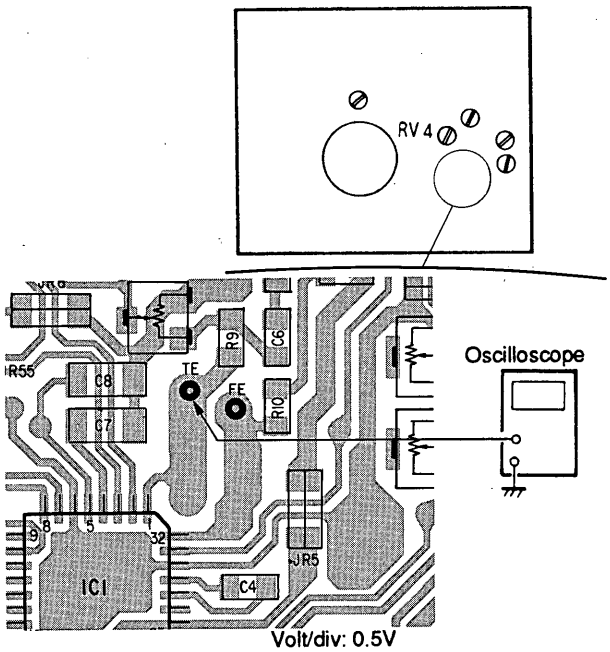
- Optical block
- RV4

Before starting this adjustment, complete the focus offset adjustment and the tracking off set adjustment.

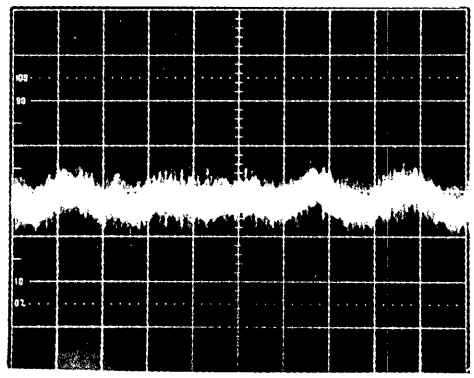
Adjustment:

1. Connect the oscilloscope to test point TE on the main board.
2. Load a disc and set mode to PLAY.
3. Turning RV4 clockwise, from the leftmost position, observe the waveform on the oscilloscope.
   Fix RV4 at the position where the waveform is become stable.

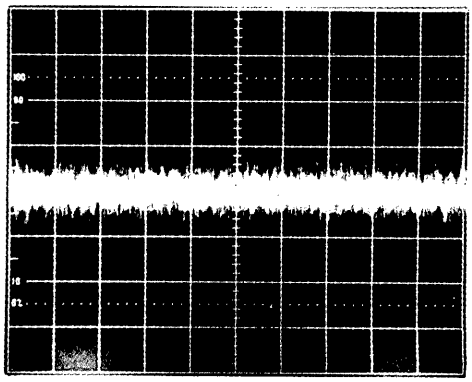
Adjustment point: MD main board



Volt/div: 0.5V
Tile/div: 2msec



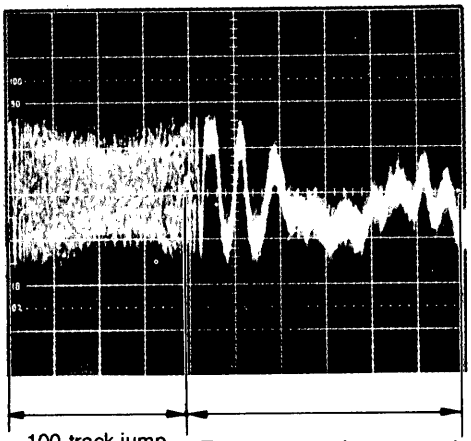
Fluctuating waveform



Stable waveform

- If the gain is too low

When music is selected by pressing button ⏮ or ⏭ , the tracking jump waveform is not focused completely and the music selection is delayed. (Break function does not work wall because its gain is too low.)

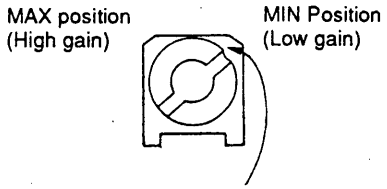


100-track jump waveform

Traverse waveform caused when break is not functioning well

- If the gain is too high

Noise due to scratches and dust is heard and the operation becomes unstable.



The standard setting is with the contact point located at this position.

—RV4 standard setting—

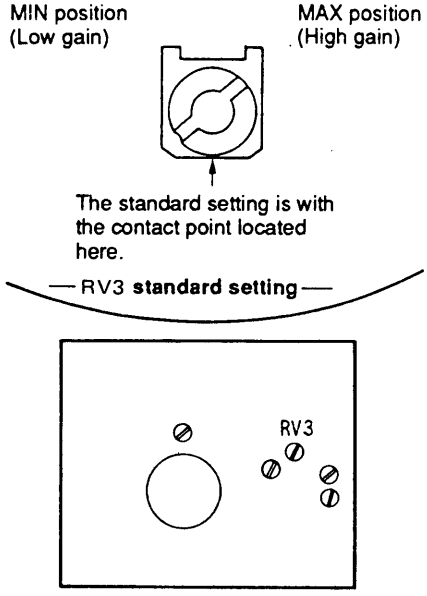
Focus gain adjustment (Coarse adjustment)

This adjustment is not required unless the following parts are replaced:

- Optical block
- RV3

Adjustment

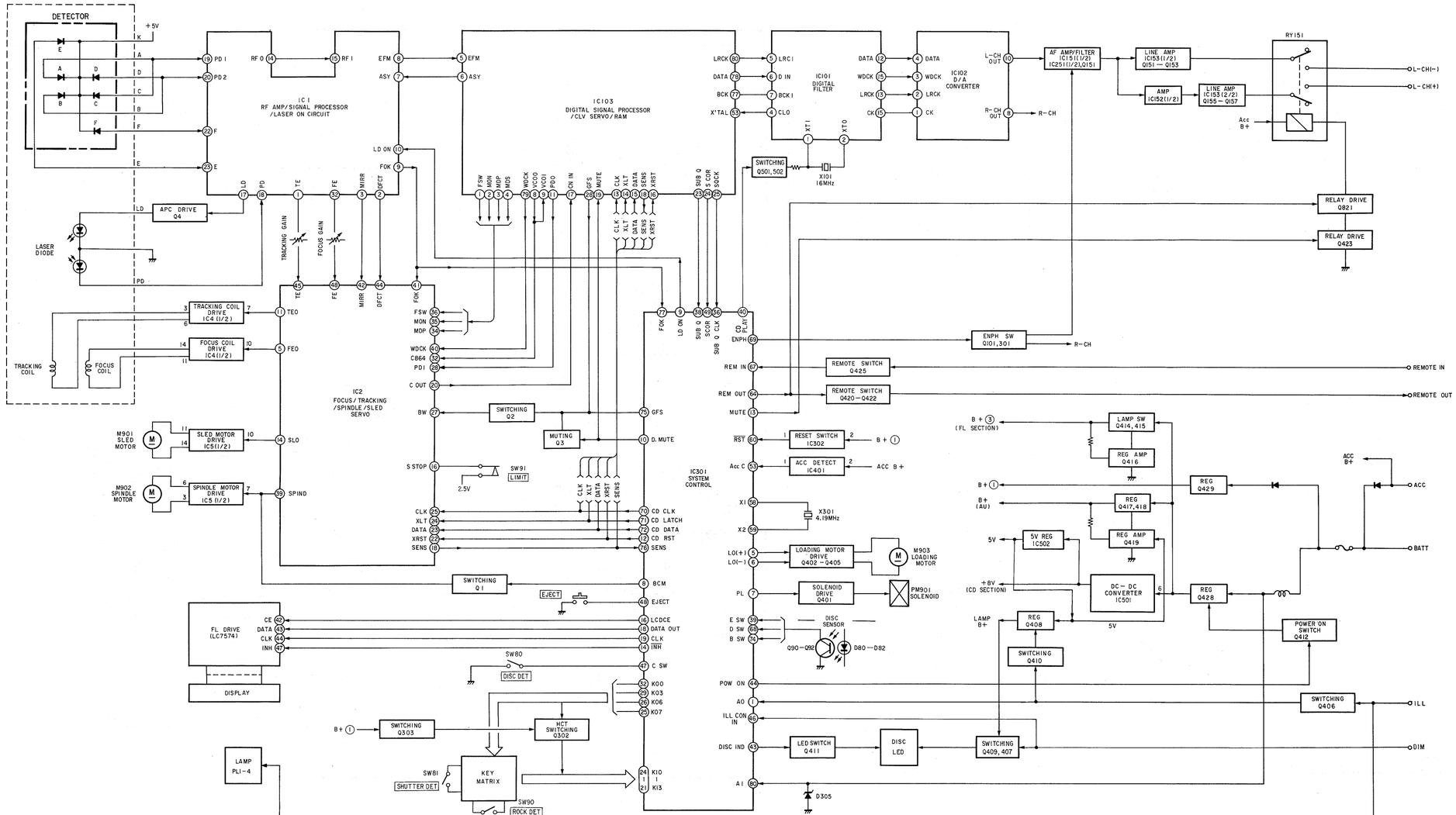
1. Set RV3 to the standard position.
2. Check whether operation noise (white noise type) caused by the double-axis device (lens section of the optical block) is abnormally loud.
   If the operation noise is too loud, turn RV3 slightly counterclockwise.



- If the gain is too low:
  Focus does not function and no music is selected.
- If the gain is too high:
  Noise caused by scratches and dust is heard and the operation becomes unstable.

SECTION 5
DIAGRAMS

5-1. BLOCK DIAGRAM



5-2. PRINTED WIRING BOARDS (MD Section)

SEE ADDITIONAL INFORMATION

- **Semiconductor Location**

Ref.No.	Location
D80	F-1
D81	F-2
D82	D-2
IC1	F-15
IC2	D-14
IC3	E-10
IC4	B-15
IC5	B-13
Q2	D-10
Q3	C-9
Q90	E-5
Q91	D-7
Q92	G-7

【LED BOARD】

【SENSOR BOARD】

【RF BOARD】

(FLEXIBLE)

TO MAIN BOARD CN103

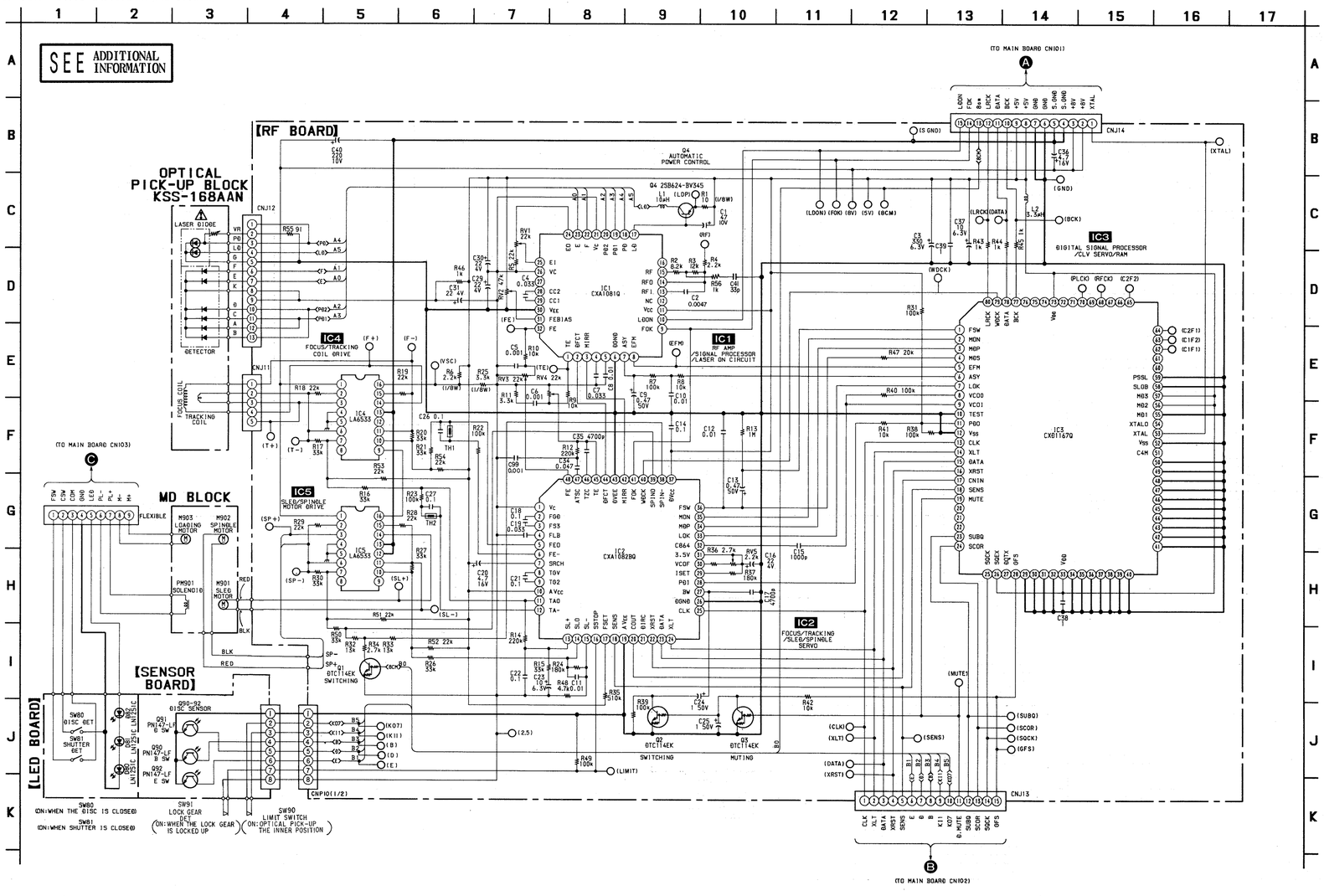
TO MAIN BOARD CN102

TO OPTICAL PICK-UP BLOCK

TO MAIN BOARD

TO OPTICAL PICK-UP BLOCK

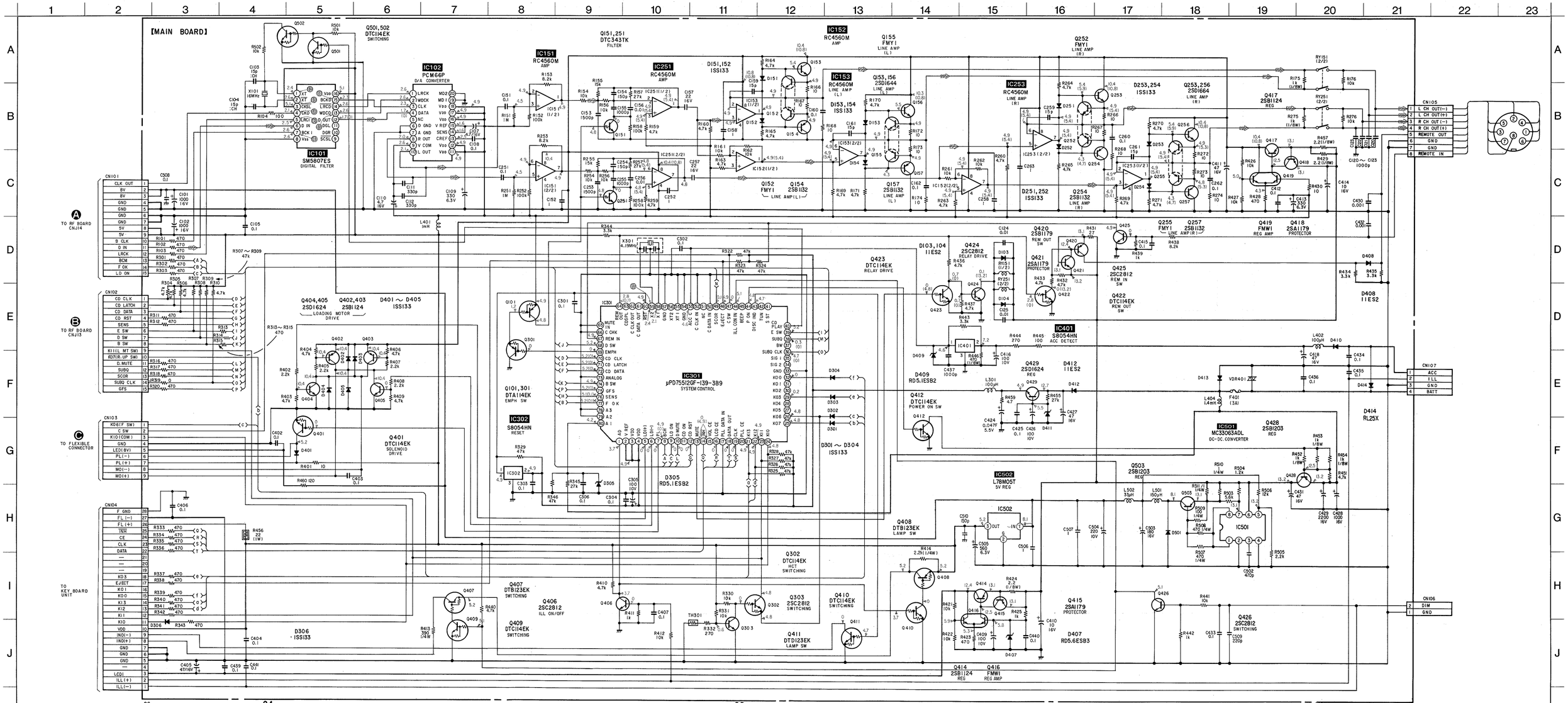
- ○—— : parts extracted from the component side.
- —— : parts extracted from the conductor side.



Note:

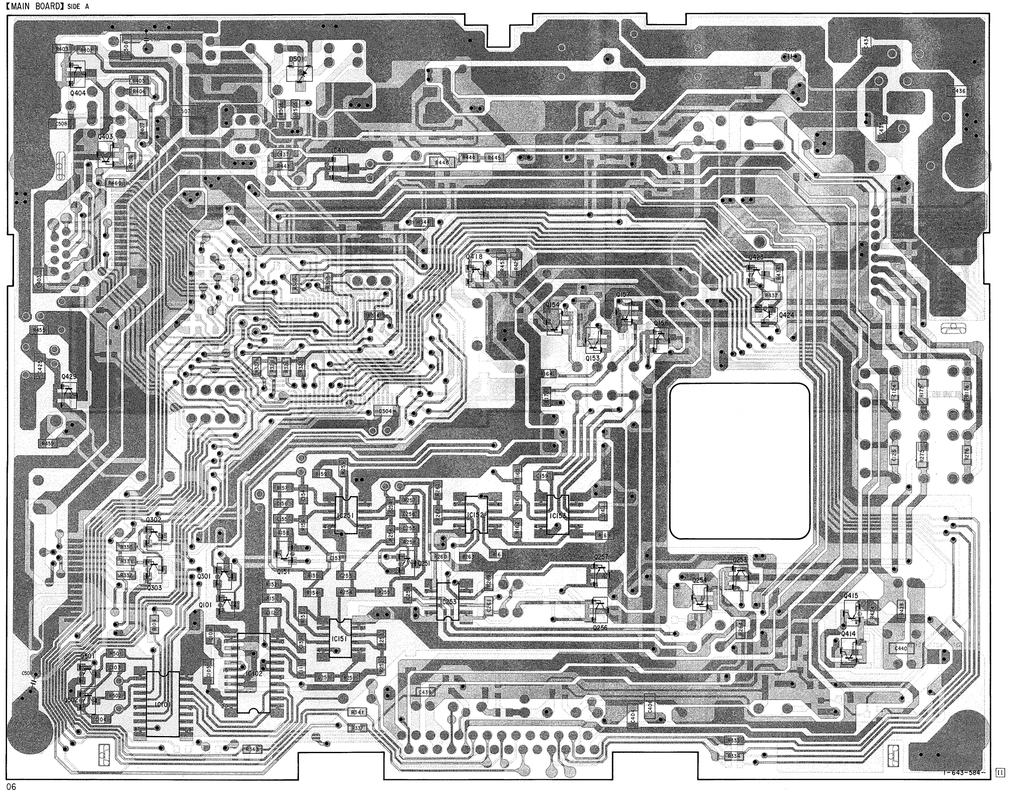
- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4W or less unless otherwise specified.

5-4. SCHEMATIC DIAGRAM (MAIN Section)

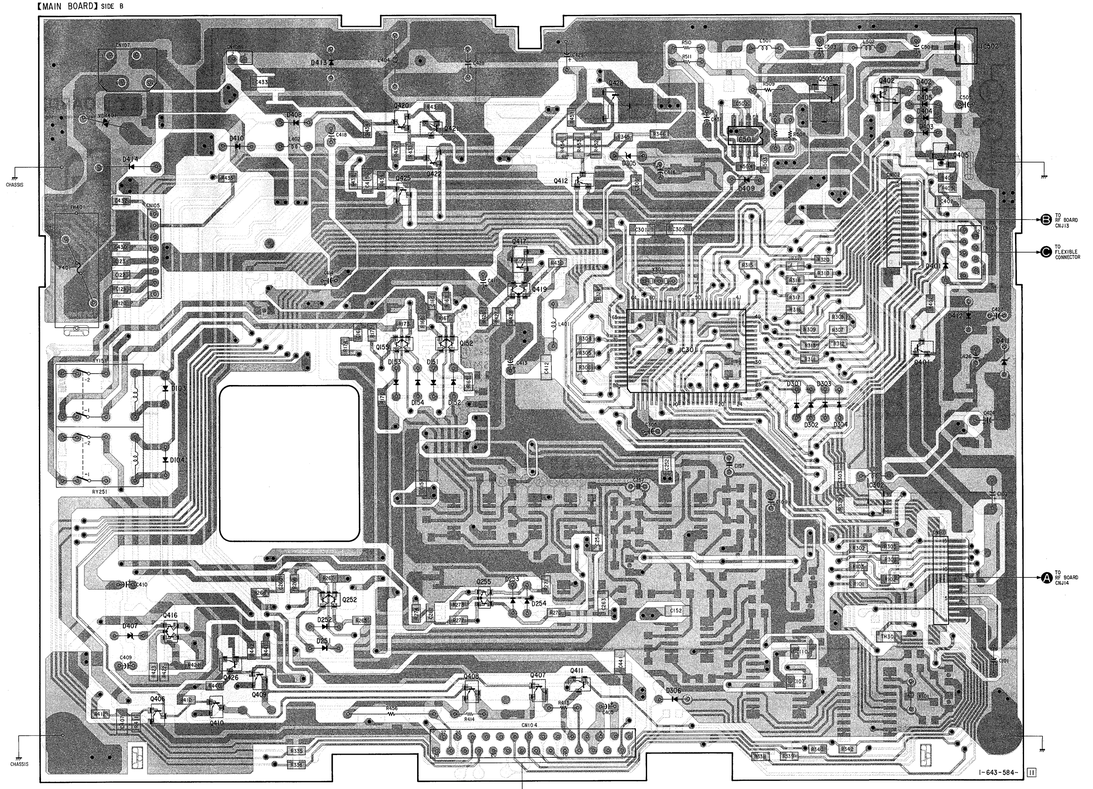


5-5. PRINTED WIRING BOARDS (MAIN Section)

【MAIN BOARD】SIDE A



【MAIN BOARD】SIDE B



- **Semiconductor Location**

Ref.No.	Location	Ref.No.	Location	Ref.No.	Location
D103	F-18	IC102	J-4	Q303	I-2
D104	G-17	IC151	J-5	Q401	F-28
D151	F-21	IC152	H-7	Q402	B-28
D152	F-21	IC153	H-8	Q403	C-2
D153	F-21	IC251	H-5	Q406	J-17
D154	F-21	IC253	I-7	Q407	J-23
D251	J-20	IC301	F-25	Q408	J-22
D252	I-20	IC302	G-27	Q409	J-19
D253	I-22	IC401	C-5	Q410	K-18
D254	I-23	IC501	C-26	Q411	J-23
D301	F-26	IC502	A-29	Q412	C-23
D302	G-26			Q416	I-17
D303	F-27	Q101	I-4	Q417	D-22
D304	G-27	Q151	I-5	Q418	D-7
D305	C-24	Q152	E-22	Q419	E-23
D306	J-25	Q153	F-9	Q420	B-21
D401	D-28	Q154	E-8	Q421	B-21
D402	B-28	Q155	E-20	Q422	C-21
D403	B-28	Q156	E-10	Q423	D-11
D404	B-28	Q157	E-9	Q424	E-12
D405	B-28	Q251	I-7	Q425	C-21
D407	I-17	Q252	I-20	Q426	J-18
D408	B-19	Q253	I-11	Q428	B-24
D410	C-18	Q254	I-10	Q429	F-2
D413	A-20	Q255	I-22	Q501	J-2
D414	C-17	Q256	I-9	Q502	J-2
D501	A-5	Q257	H-9	Q503	B-27
		Q301	I-4		
IC101	K-3	Q302	H-2		

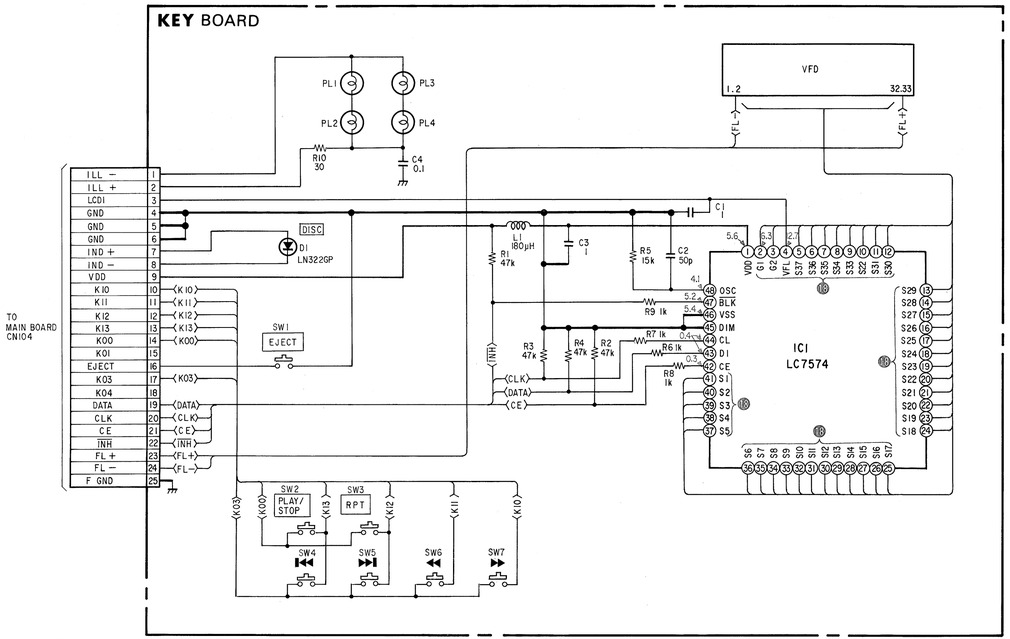
Note on Schematic Diagram:

- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and ¼W or less unless otherwise specified.
- ▭▭ : B+ line.
- ▭ : adjustment for repair.
- Power voltage is dc 14.4V and fed with requrated dc power supply from battery, accessory terminals.
- Voltage and waveforms are dc with respect to ground under no-signal (detuned) conditions.
  no mark: PLAY
- Voltages are taken with a VOM. (Input impedance 10MΩ) Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  ▱▱ : CD

Note on Mounting Diagram:

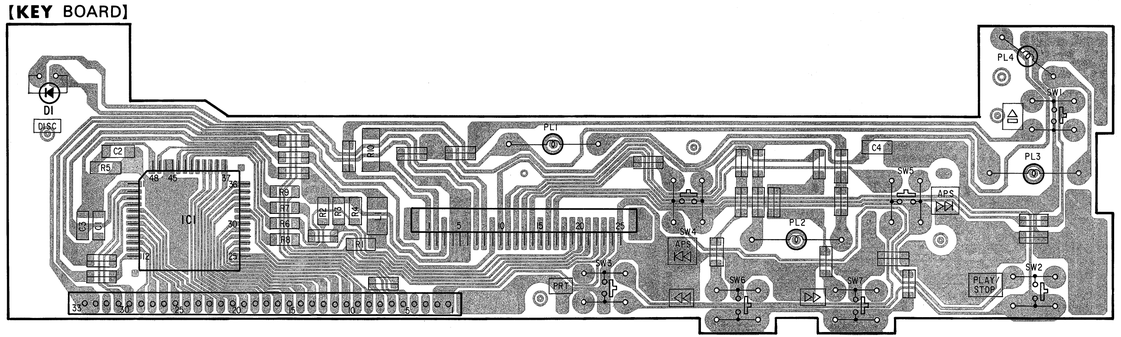
- ○—— : parts extracted from the component side.
- —— : parts extracted from the conductor side.
- ■ : parts mounted on the conductor side.
- ● : Through hole.
- ●—● : Jumper wire connected to the ground pattern on the component side.
- ▨ : Pattern on the side which is seen.
- ▨ : Pattern of the rear side.

5-6. SCHEMATIC DIAGRAM (Key Board Section)



- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics and tantaliums.
- All resistors are in Ω and ¼W or less unless otherwise specified.
- ⚬ ▬▬ : B+ line.
- ⚬ ▭ : adjustment for repair.
- ⚬ Power voltage is dc 14.4V and fed with requrated dc power supply from battery, accessory terminals.
- ⚬ Voltage and waveforms are dc with respect to ground under no-signal (detuned) conditions.
  no mark : PLAY
- ⚬ Voltages are taken with a VOM. (Input impedance 10MΩ) Voltage variations may be noted due to normal production tolerances.
- ⚬ Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- ⚬ Circled numbers refer to waveforms.

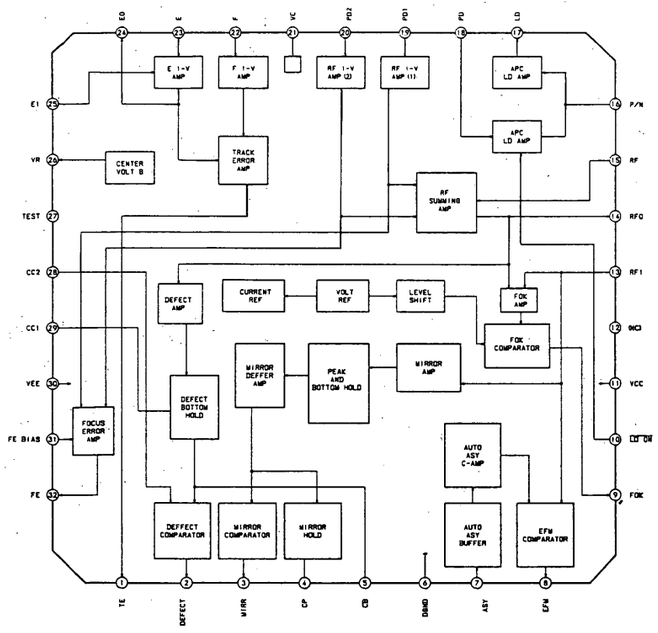
5-7. PRINTED WIRING BOARDS (Key Board Section)



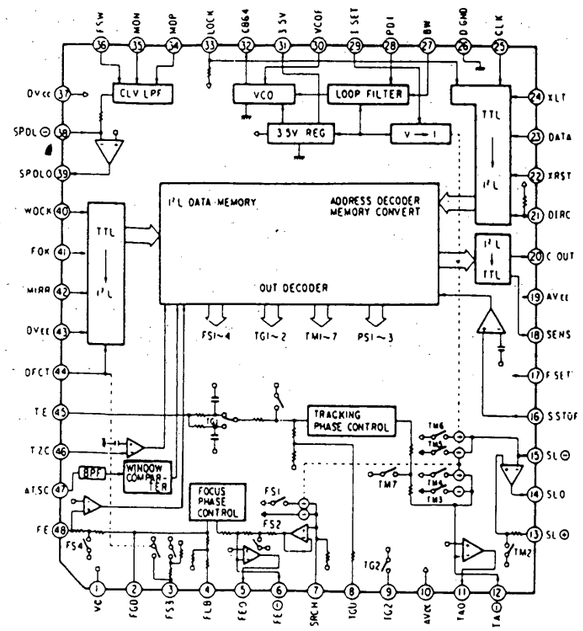
- ⚬—— : parts extracted from the component side.
- ⚬—— : parts extracted from the conductor side.

5-8. IC BLOCK DIAGRAM

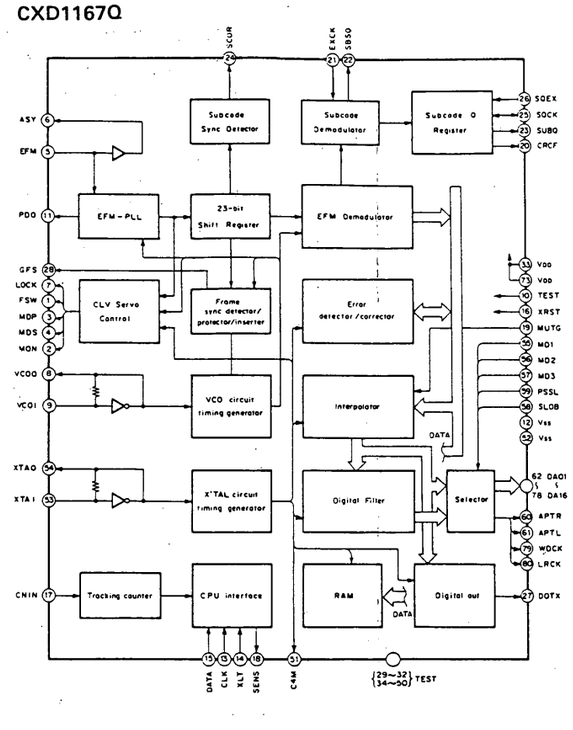
● **IC1**
CXA1081Q



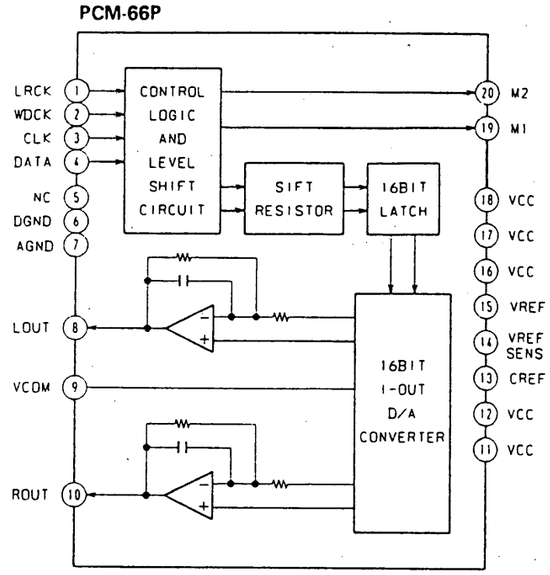
● **IC2**
CXA1082BQ



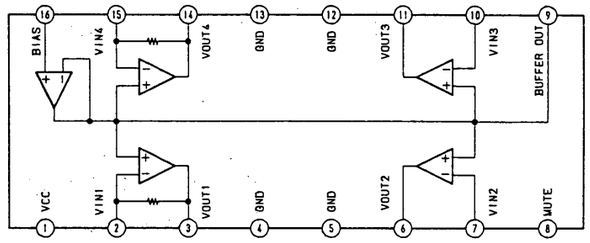
● **IC3**
CXD1167Q



● **IC301**
PCM-66P

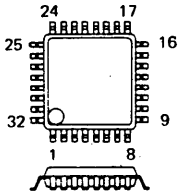


● **IC4. 5**
LA6533

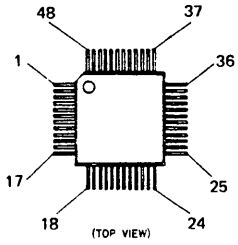


5-9. SEMICONDUCTOR LEAD LAUOYTS LAYOUTS

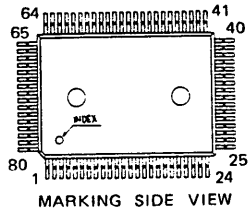
CXA1081Q



CXA1082BQ
LC7574E

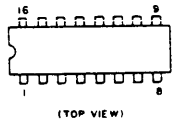


CXD1167Q
μPD75512GF-139-3B9

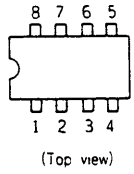


MARKING SIDE VIEW

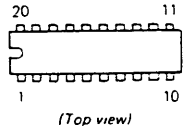
LA6533
SM5807ES



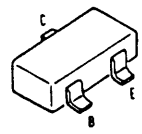
RC4560M



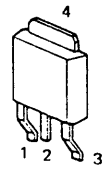
PCM-66P



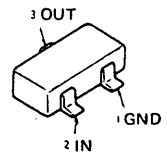
DTA114EK
DTC114EK
DTC343TK
2SA1162
2SB1124-S
2SB624T1-BV345
2SC2812-YG
2SC2812-LS
2SC2812-L5



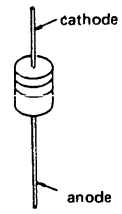
2SB1203FAS



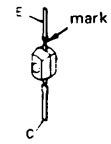
DTB123EK
DTD123EK



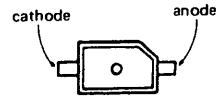
RD5.1ES-B1
RD5.6ES-B3
1SS119
11ES2



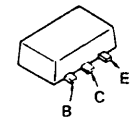
PN147-LF



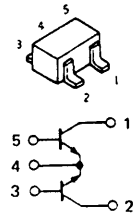
LN1251C



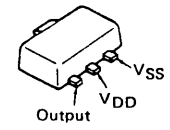
2SB1115A
2SD1615A
2SD1624
2SD1624-S



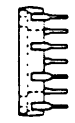
FMY1
FMW1

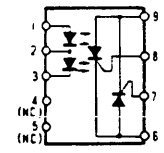


S-8054HN-CB

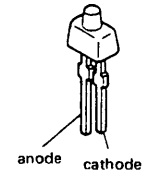


U05E



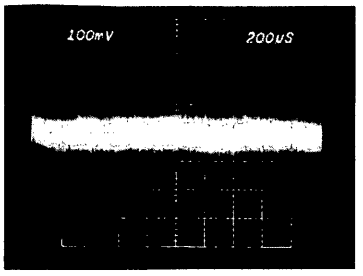


LN322GP

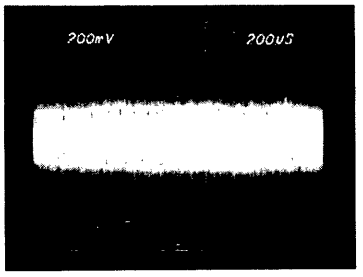


5-10. WAVEFORMS

①



②



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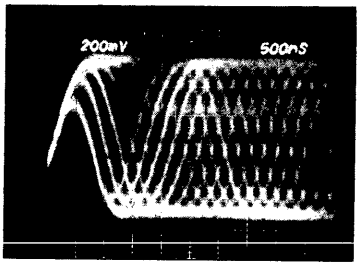

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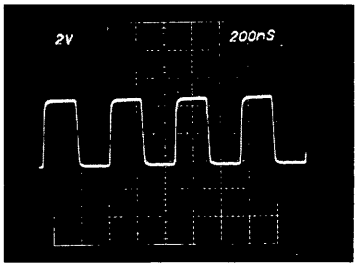

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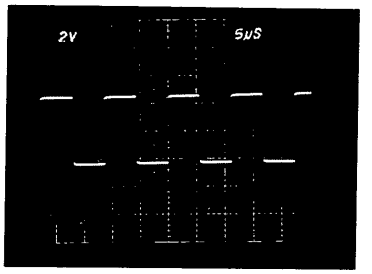

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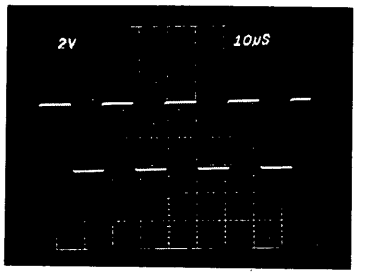

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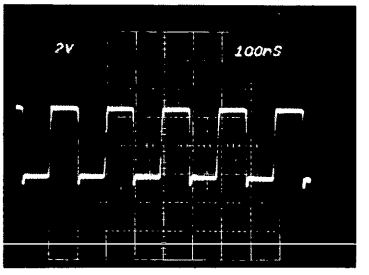

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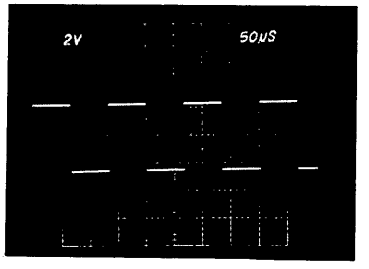

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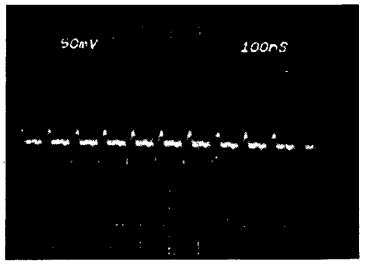

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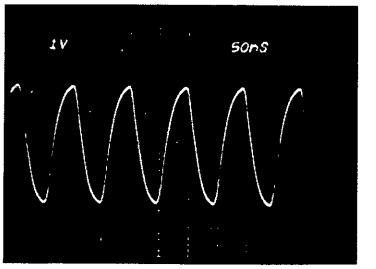

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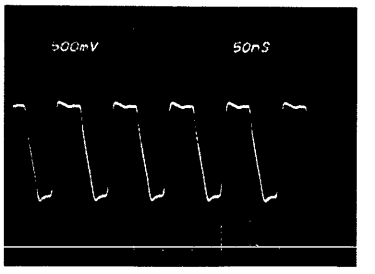

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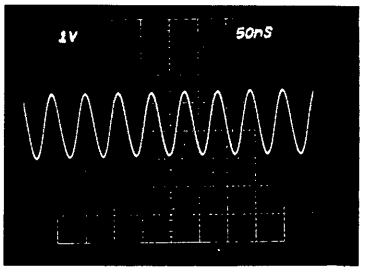

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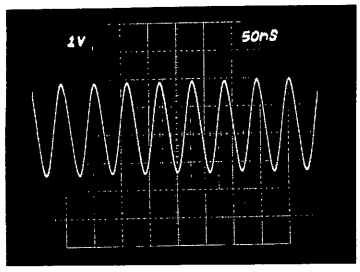

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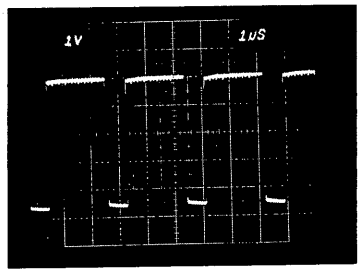

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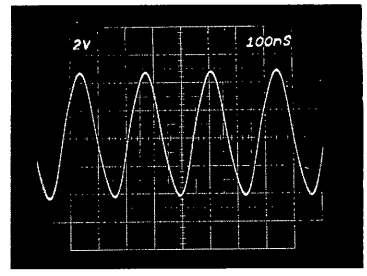

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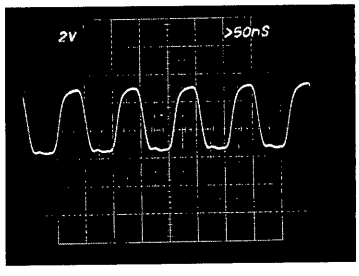
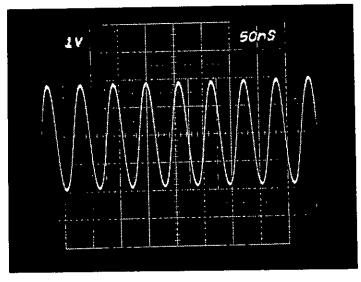
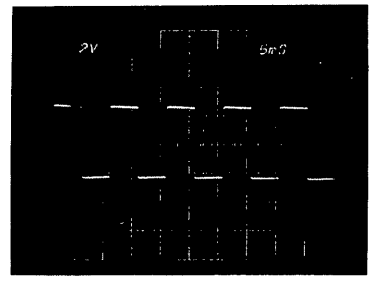


⑯



⑱



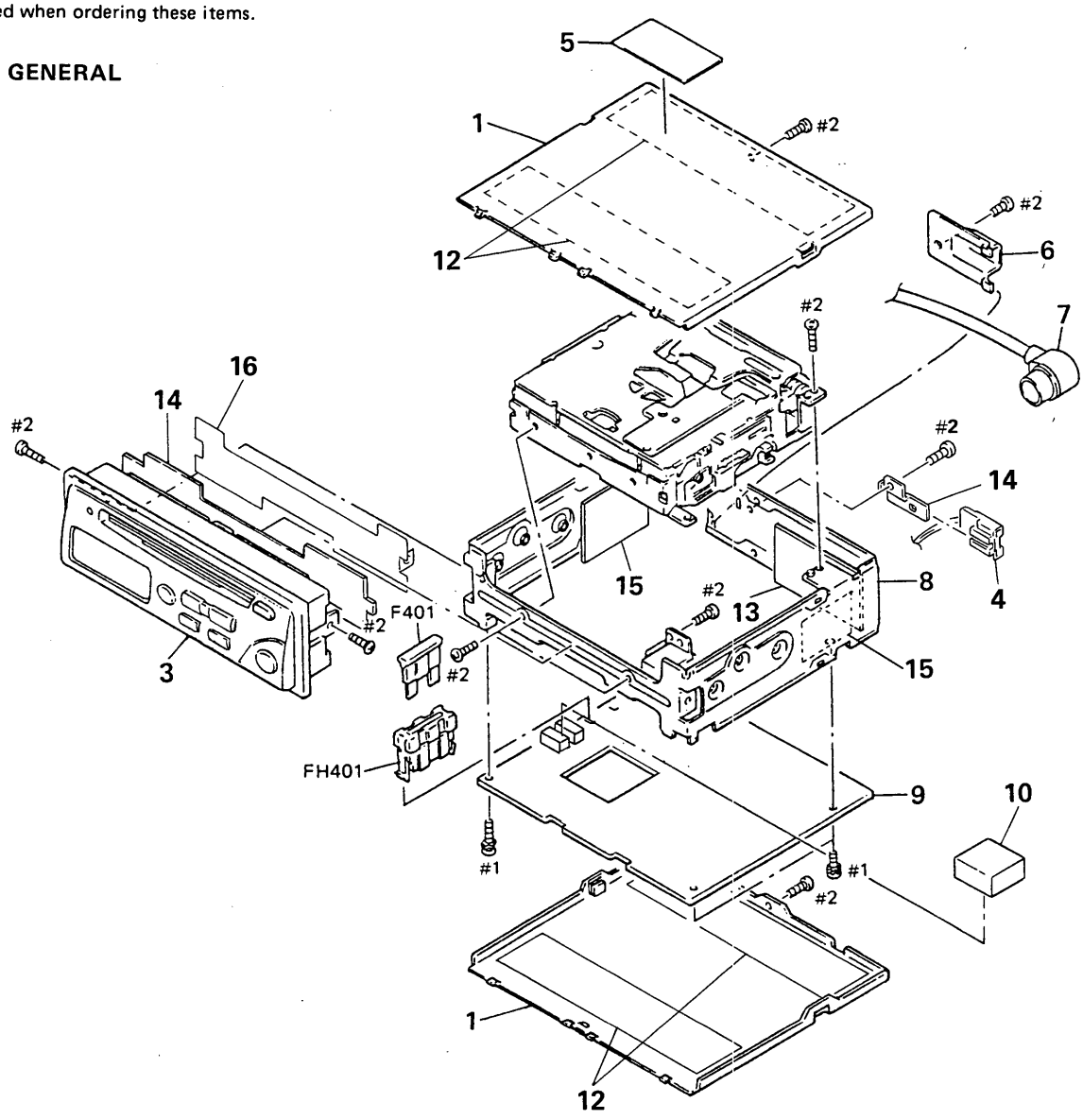
SECTION 6
EXPLODED VIEWS

NOTE:

- –XX, –X mean standardized parts, so they may have some differences from the original one.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list is given in the last of this parts list.

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

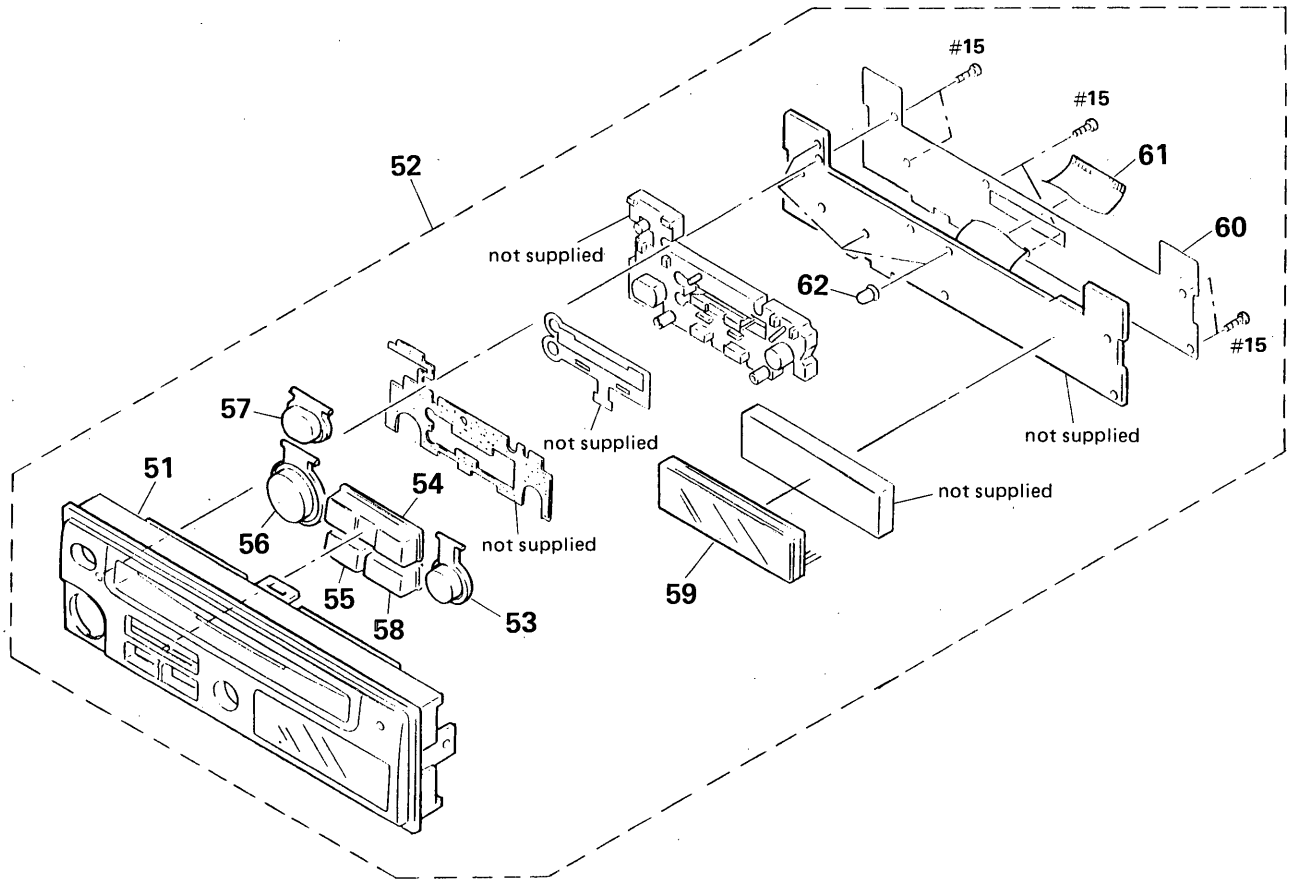
6-1. GENERAL



Ref.No.	Part No.	Description	Remark
* 1	3-360-711-11	COVER	
3	1-466-720-11	KEY BOARD UNIT	
4	1-574-182-21	CORD (WITH CONNECTOR)	
5	3-377-156-01	LABEL, MODEL NUMBER (NISSAN)	
* 6	3-320-587-01	STOPPER (C), CORD	
7	1-590-797-11	CORD (WITH CONNECTOR)	
* 8	X-3331-920-1	CHASSIS ASSY	
* 9	A-3273-876-A	MAIN BOARD, COMPLETE	
10	9-911-844-XX	CUSHION (1)	
* 12	3-329-841-01	CLOTH, BLIND	
* 13	3-370-166-01	SHEET (1), DUST PROTECTION	
* 14	3-348-535-01	BRACKET (CONNECTER)	
* 15	3-370-167-01	SHEET (2), DUST PROTECTION	
* 16	3-370-168-01	SHEET, SHIELD	
F401	1-532-731-11	FUSE (BRADE TYPE) (AUTO FUSE)	
FH401	1-533-179-11	HOLDER, FUSE	

6-2. KEY BOARD

SEE ADDITIONAL INFORMATION

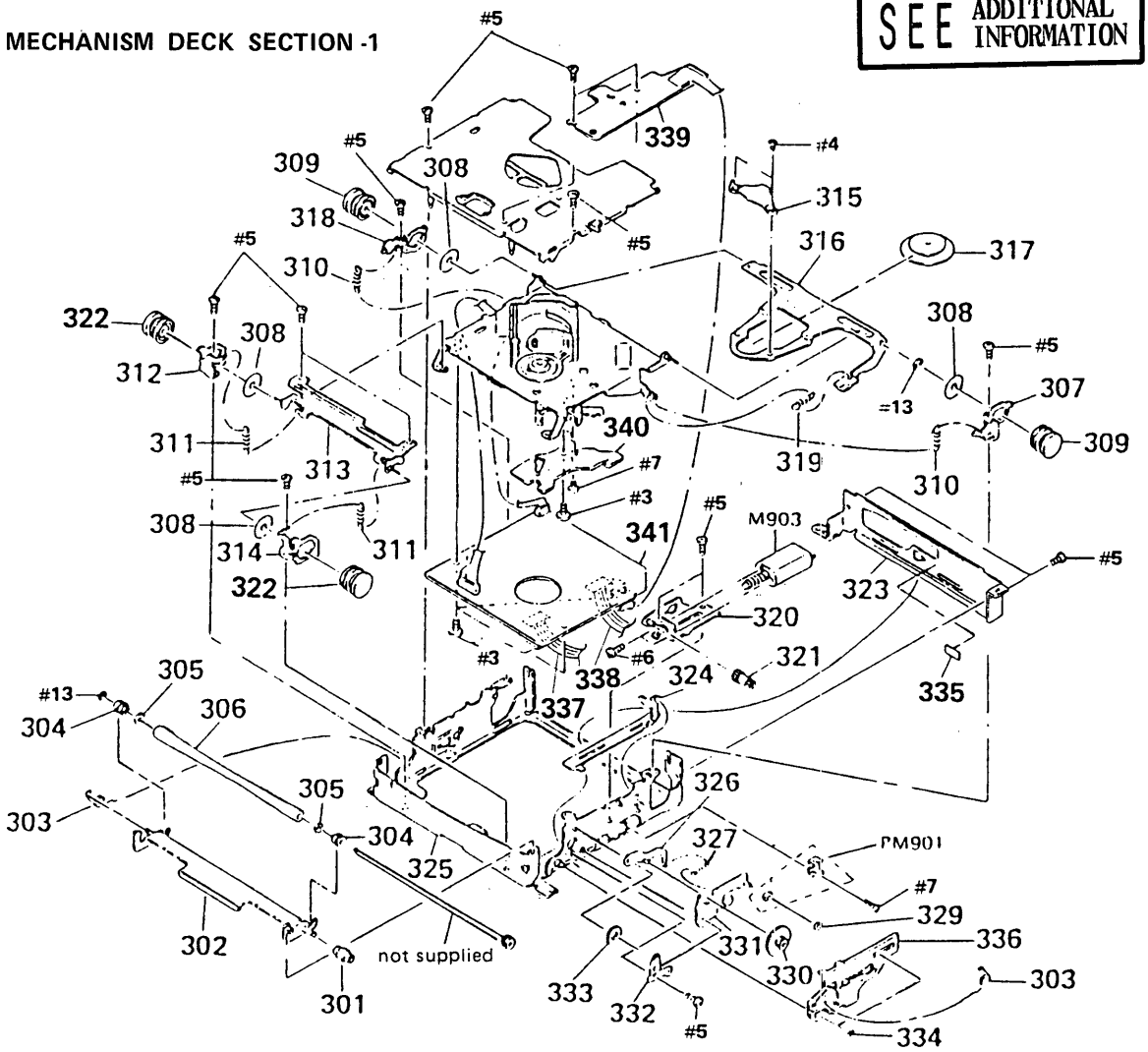


Ref. No.	Part No.	Description	Remark
51	9-902-370-01	KEY BOARD ASSY	
* 52	1-466-720-11	KEY BOARD UNIT	
53	9-900-491-01	SWITCH TACT (RPT)	
54	9-900-491-01	SWITCH TACT (APS)	
55	9-900-491-01	SWITCH TACT (◀◀)	
56	9-900-491-01	SWITCH TACT (PLAY/STOP)	
57	9-900-491-01	SWITCH TACT (▲)	
58	9-900-491-01	SWITCH TACT (▶▶)	

Ref. No.	Part No.	Description	Remark
59	9-902-369-01	DISPLAY PANEL, LIQUIDE CRYSTAL	
60	9-900-481-01	INSULATOR	
61	9-902-368-01	CABLE, FLEXIBLE	
62	9-902-367-01	FILTER (LAMP CAP)	

6-3. MECHANISM DECK SECTION -1

SEE ADDITIONAL INFORMATION

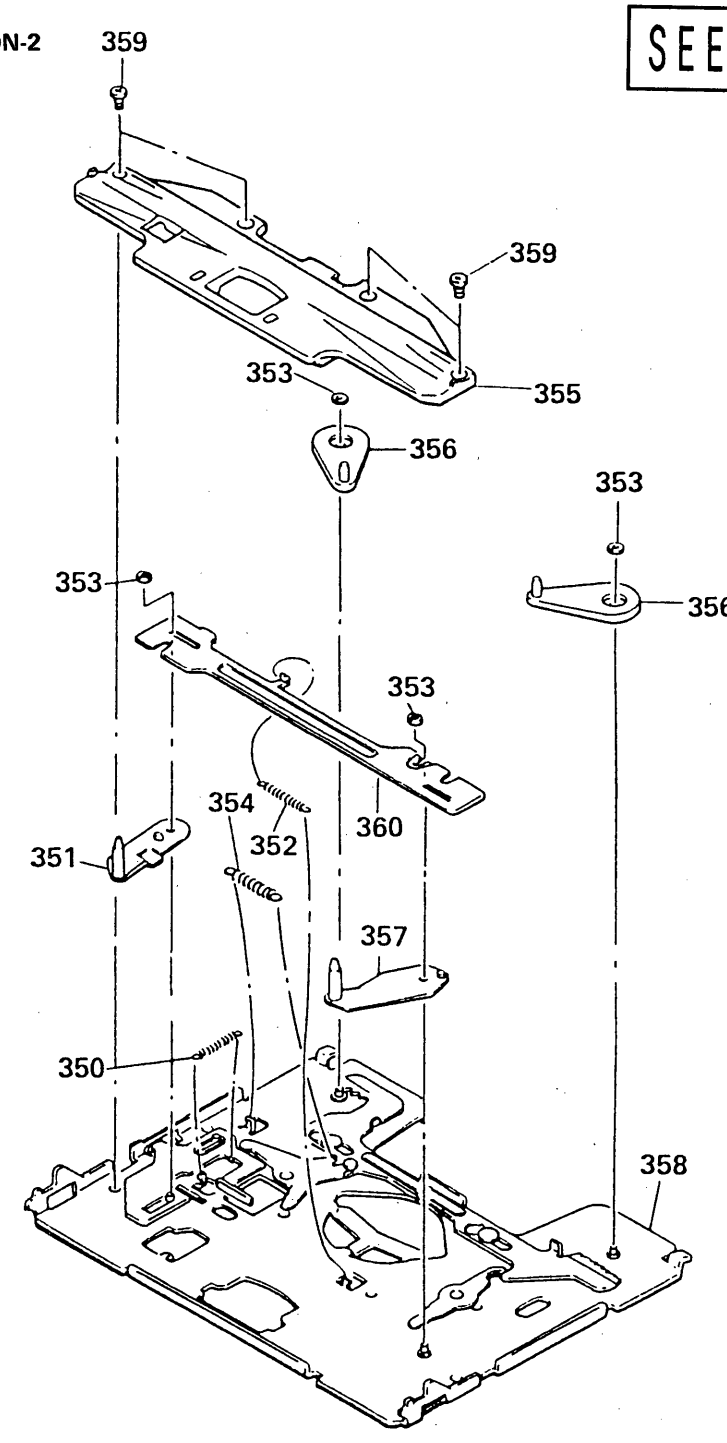


Ref. No.	Part No.	Description	Remark
301	3-351-495-01	SLEEVE (2)	
* 302	X-3351-422-1	BRACKET (ROLLER) ASSY	
303	3-351-437-01	SPRING (ROLLER)	
304	3-351-416-01	BEARING (ROLLER SHAFT)	
305	3-701-438-11	WASHER, 2.5	
306	3-323-231-11	ROLLER (LOWER)	
* 307	3-351-494-01	BRACKET (DUMPER C)	
308	3-323-263-01	WASHER, TEFLON	
309	3-330-929-11	DAMPER (S), HYPER	
310	3-351-445-01	SPRING (FLOATING C, D), TENSION	
311	3-351-444-01	SPRING (FLOATING A, B), TENSION	
* 312	3-351-493-01	BRACKET (DUMPER B)	
* 313	X-3351-423-1	BRACKET (F) ASSY	
* 314	3-351-492-01	BRACKET (DUMPER A)	
315	3-342-625-01	RETAINER (S2), THRUST	
* 316	3-351-453-01	ARM, CHUCKING	
317	3-348-558-01	PLATE (F), CHUCK	
* 318	3-351-411-01	BRACKET (DAMPER D)	
319	3-351-443-01	SPRING (CHUCKING), TENSION	
* 320	X-3351-419-1	BRACKET (M) ASSY	
321	3-351-498-01	GEAR (B, WORM WHEEL)	

Ref. No.	Part No.	Description	Remark
322	3-364-310-01	DAMPER (F)	
* 323	3-354-758-03	BRACKET (REAR N1)	
* 324	X-3351-418-1	LEVER (CH RELEASE) ASSY	
* 325	X-3351-428-2	CHASSIS (MAIN F2) ASSY	
* 326	X-3351-420-1	LEVER (GEAR C) ASSY	
327	3-351-463-01	SPRING (SW LEVER 2), TENSION	
329	3-315-384-11	WASHER, STOPPER	
330	3-351-438-01	GEAR, CAM	
* 331	X-3351-421-1	LEVER (SW) ASSY	
* 332	3-351-482-01	RETAINER (SIDE GEAR 2)	
333	3-351-414-01	GEAR (C)	
334	3-578-224-00	WASHER	
* 335	3-351-464-01	SHEET (SM), INSULATING	
336	3-351-456-01	LEVER (L, E)	
337	1-643-509-11	PC BOARD, (A) FLEXIBLE	
338	1-643-507-11	PC BOARD, (B) FLEXIBLE	
* 339	A-3273-871-A	SENSOR BOARD, COMPLETE	
* 340	A-3273-869-A	LED BOARD, COMPLETE	
* 341	A-3273-870-A	RF BOARD, COMPLETE	
350	3-351-448-01	SPRING (LOCK LEVER), TENSION	
M903	A-3249-213-A	GEAR (A) ASSY (LOADING)	
PM901	1-454-461-11	SOLENOID, PLUNGER	

6-4. MECHANISM DECK SECTION-2

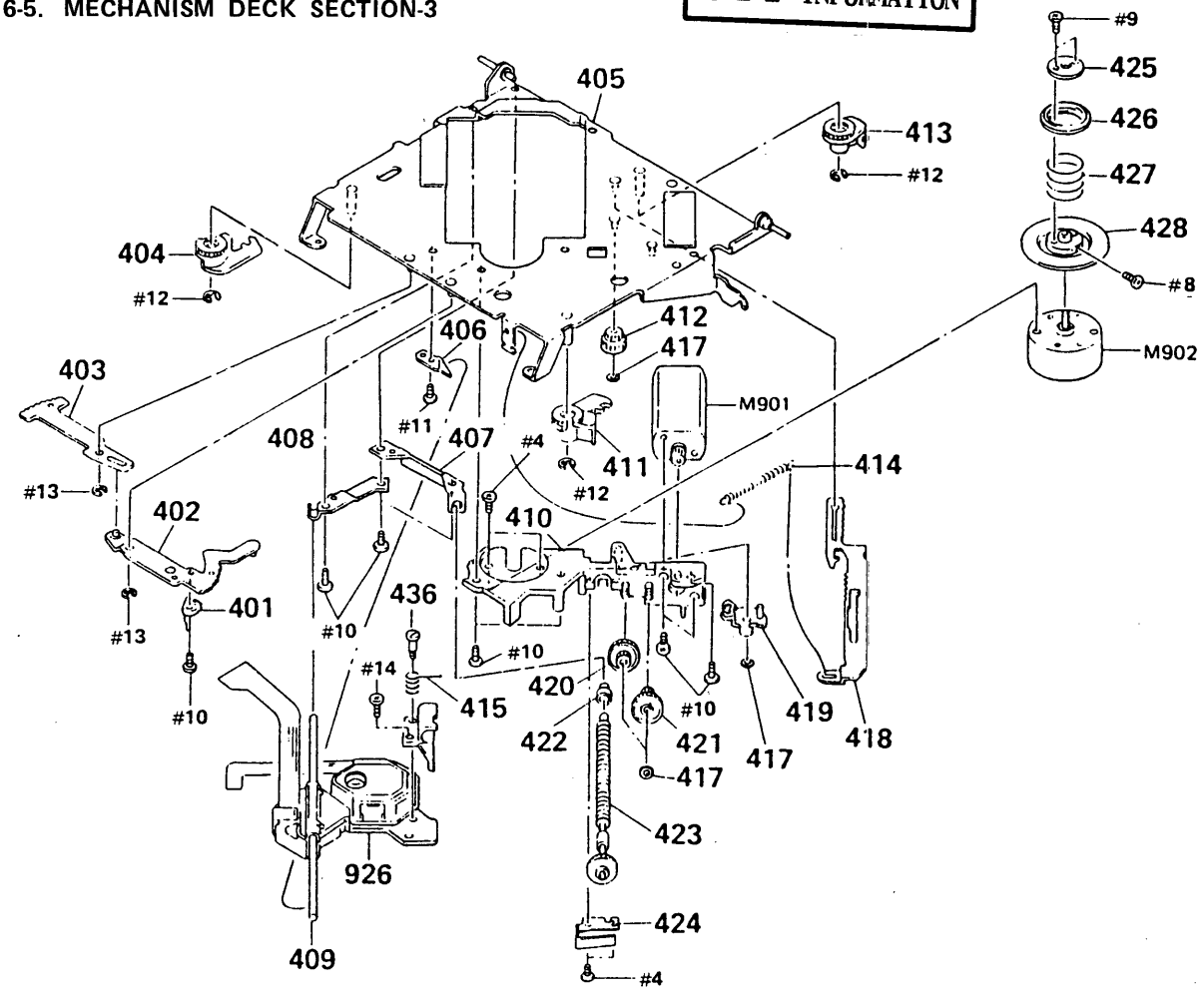
SEE ADDITIONAL INFORMATION



Ref. No.	Part No.	Description	Remark
* 351	X-3351-426-1	LEVER (D DETECTION R2) ASSY	
352	3-351-447-02	SPRING (JOINT F), TENSION	
353	3-578-224-00	WASHER	
354	3-351-446-01	SPRING (JOINT R), TENSION	
355	3-351-496-01	GUIDE (DISK 2)	
356	3-351-432-01	GEAR (DS)	
* 357	X-3351-425-1	LEVER (D DETECTION L2) ASSY	
* 358	X-3351-424-1	CHASSIS (T2) ASSY	
* 360	3-351-489-02	JOINT (F2)	
926	8-848-133-11	DEVICE, OPTICAL KSM-168AAN	
M903	A-3249-535-A	GEAR (A) ASSY (LOADING)	
PM901	1-454-461-11	SOLENOID, PLUNGER	

6-5. MECHANISM DECK SECTION-3

SEE ADDITIONAL INFORMATION



No.	Part No.	Description	Remarks
401	*2-643-407-01	PLATE, SWITCH	
402	*X-2641-534-1	LEVER (A) ASSY, LOCK	
403	*2-641-582-01	LEVER (B), LOCK	
404	2-643-414-02	GEAR (B), LOCK	
405	*X-2641-536-2	CHASSIS ASSY, MAIN	
406	2-643-402-01	RETAINER (B), SHAFT	
407	2-643-403-01	RETAINER, FEED SCREW	
408	2-643-401-01	RETAINER (A), SHAFT	
409	2-640-632-01	SHAFT, GUIDE	
410	*X-2641-535-2	CHASSIS ASSY, SUB	
411	2-643-413-02	GEAR (A), LOCK	
412	2-643-405-01	WHEEL, WORM	
413	2-641-599-02	GEAR (C), GEAR	
414	2-641-595-02	SPRING, TENSION	
415	2-643-420-01	SPRING	
416	2-643-412-02	NUT, FEED	
417	3-321-813-01	WASHER, COTTER POLYETHYLENE	
418	*2-641-583-02	LEVER (C), LOCK	
419	2-643-406-02	LEVER, SELECTION	
420	2-643-410-01	GEAR (E)	

No.	Part No.	Description	Remarks
421	2-643-409-01	GEAR (D)	
422	2-643-408-02	RETAINER, THRUST	
423	A-4910-184-B	SCREW ASSY, FEED	
424	2-643-404-01	SPRING	
425	2-640-650-01	STOPPER, RING	
426	2-643-418-01	RING, CENTER	
427	2-640-617-02	SPRING, COMPRESSION	
428	X-2641-541-1	TURNTABLE ASSY	
429	7-627-554-18	SCREW, PRECISION +P 2X3.5 TYPE1	
430	7-624-104-04	STOP RING 2.0, TYPE -E	
431	7-624-106-04	STOP RING 3.0, TYPE -E	
432	7-627-553-17	PRECISION SCREW +P 2X2 TYPE 3	
433	7-627-552-08	SCREW, PRECISION +P 1.7X2.5	
434	7-627-451-17	SCREW, PRECISION +K 1.4X2.5	
435	7-627-451-57	SCREW, PRECISION +K 1.4X4	
436	2-643-423-01	SCREW, SP	
437	7-627-852-17	+P 1.7X4	
926	⚠ 8-848-124-11	DEVICE, OPTICAL KSS-168ARP	
M901	A-4910-183-A	MOTOR ASSY, SL (SLED)	
M902	1-541-448-41	MOTOR (SPINDLE)	

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

SEE ADDITIONAL INFORMATION

SECTION 7
ELECTRICAL PARTS LIST

KEY LED

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- –XX, –X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms
  METAL: Metal-film resistor
  METAL OXIDE: Metal Oxide-film resistor
  F: nonflammable
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u: μ, for example:
  uA...: μA..., uPA...: μPA...,
  uPB...: μPB..., uPC...: μPC...,
  uPD...: μPD...
- CAPACITORS
  uF: μF
- COILS
  uH: μH

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

When indicating parts by reference number, please include the board name.

Ref.No.	Part No.	Description			Remark
*	1-466-720-11	KEY BOARD UNIT			
		**********			
		< CAPACITOR >			
C1	1-162-638-00	CERAMIC CHIP	1uF		
C2	1-163-174-00	CERAMIC CHIP	50PF		
C3	1-162-638-00	CERAMIC CHIP	1uF		
C4	1-163-077-00	CERAMIC CHIP	0.1uF		
		< DIODE >			
D1	8-719-420-99	DIODE LN322GP			
		< IC >			
IC1	8-759-823-73	IC LC 7574E			
		< INDUCTOR >			
L1	1-410-657-00	INDUCTOR	180uH		
		< DISPLAY >			
LCD1	9-902-369-01	DISPLAY PANEL, LIQUID CRYSTAL			
		< LAMP PILOT >			
PL1	9-900-488-01	LAMP, PILOT			
PL2	9-900-488-01	LAMP, PILOT			
PL3	9-900-488-01	LAMP, PILOT			
PL4	9-900-488-01	LAMP, PILOT			
		< RESISTOR >			
R1	1-216-238-00	METAL CHIP	47K	5%	1/8W
R2	1-216-238-00	METAL CHIP	47K	5%	1/8W
R3	1-216-238-00	METAL CHIP	47K	5%	1/8W
R4	1-216-238-00	METAL CHIP	47K	5%	1/8W
R5	1-216-226-00	METAL CHIP	15K	5%	1/8W
R6	1-216-198-00	METAL CHIP	1K	5%	1/8W
R7	1-216-198-00	METAL CHIP	1K	5%	1/8W
R8	1-216-198-00	METAL CHIP	1K	5%	1/8W
R9	1-216-198-00	METAL CHIP	1K	5%	1/8W
R10	1-216-012-00	METAL CHIP	30	5%	1/8W
		< SWITCH >			
SW1	9-900-491-01	SWITCH TACT	(▲)		
SW2	9-900-491-01	SWITCH TACT	(PLAY/STOP)		
SW3	9-900-491-01	SWITCH TACT	(RPT)		
SW4	9-900-491-01	SWITCH TACT	(⏮ APS)		
SW5	9-900-491-01	SWITCH TACT	(⏭ APS)		
SW6	9-900-491-01	SWITCH TACT	(◀◀)		
SW7	9-900-491-01	SWITCH TACT	(▶▶)		

****

LED BOARD
****

	1-643-508-11	(C) FLEXIBLE BOARD	
*	3-355-252-01	SHEET (MD), INSULATING	
		< DIODE >	
D80	8-719-404-19	DIODE LN1251C	
D81	8-719-404-19	DIODE LN1251C	
D82	8-719-404-19	DIODE LN1251C	
		< SWITCH >	
SW80	1-571-754-11	SWITCH, PUSH (1 KEY) (DISK DET)	
SW81	1-571-754-11	SWITCH, PUSH (1 KEY) (SHUTTER DET)	

****

MAIN

Ref.No.	Part No.	Description			Remark
*	A-3273-876-A	MAIN BOARD, COMPLETE			
		**********			
	9-911-844-XX	CUSHION (1)			
*	3-369-610-01	CUSHION (2)			
		< CAPACITOR >			
C101	1-124-555-00	ELECT	1000uF	20%	16V
C102	1-124-471-00	ELECT	1000uF	20%	6.3V
C103	1-163-097-00	CERAMIC CHIP	15PF	5%	50V
C104	1-163-097-00	CERAMIC CHIP	15PF	5%	50V
C105	1-163-077-00	CERAMIC CHIP	0.1uF	10%	25V
C107	1-135-155-21	TANTALUM CHIP	4.7uF	10%	16V
C108	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C109	1-128-285-11	ELECT	330uF	20%	6.3V
C110	1-135-155-21	TANTALUM CHIP	4.7uF	10%	16V
C111	1-163-003-11	CERAMIC CHIP	330PF	10%	50V
C112	1-163-003-11	CERAMIC CHIP	330PF	10%	50V
C120	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C121	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C122	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C123	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C124	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C125	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C151	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C152	1-162-638-11	CERAMIC CHIP	1uF		16V
C153	1-163-011-11	CERAMIC CHIP	0.0015uF	10%	50V
C154	1-163-121-00	CERAMIC CHIP	150PF	5%	50V
C155	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C156	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C157	1-128-108-11	ELECT	22uF	20%	16V
C158	1-162-638-11	CERAMIC CHIP	1uF		16V
C159	1-163-097-00	CERAMIC CHIP	15PF	5%	50V
C160	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C161	1-163-097-00	CERAMIC CHIP	15PF	5%	50V
C162	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C251	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C252	1-162-638-11	CERAMIC CHIP	1uF		16V
C253	1-163-011-11	CERAMIC CHIP	0.0015uF	10%	50V
C254	1-163-121-00	CERAMIC CHIP	150PF	5%	50V
C255	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C256	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C257	1-128-108-11	ELECT	22uF	20%	16V
C258	1-162-638-11	CERAMIC CHIP	1uF		16V
C259	1-163-097-00	CERAMIC CHIP	15PF	5%	50V
C260	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C261	1-163-097-00	CERAMIC CHIP	15PF	5%	50V
C262	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C263	1-162-638-11	CERAMIC CHIP	1uF		16V

Ref.No.	Part No.	Description			Remark
C301	1-163-077-00	CERAMIC CHIP	0.1uF	10%	25V
C302	1-163-077-00	CERAMIC CHIP	0.1uF	10%	25V
C303	1-163-077-00	CERAMIC CHIP	0.1uF	10%	25V
C304	1-163-077-00	CERAMIC CHIP	0.1uF	10%	25V
C305	1-124-584-00	ELECT	100uF	20%	10V
C306	1-163-077-00	CERAMIC CHIP	0.1uF	10%	25V
C402	1-163-077-00	CERAMIC CHIP	0.1uF	10%	25V
C403	1-163-077-00	CERAMIC CHIP	0.1uF	10%	25V
C404	1-163-077-00	CERAMIC CHIP	0.1uF	10%	25V
C405	1-124-589-11	ELECT	47uF	20%	16V
C406	1-163-077-00	CERAMIC CHIP	0.1uF	10%	25V
C407	1-163-077-00	CERAMIC CHIP	0.1uF	10%	25V
C409	1-124-584-00	ELECT	100uF	20%	10V
C410	1-126-157-11	ELECT	10uF	20%	16V
C411	1-124-589-11	ELECT	47uF	20%	16V
C412	1-163-077-00	CERAMIC CHIP	0.1uF	10%	25V
C413	1-126-599-11	ELECT	330uF	20%	6.3V
C414	1-126-157-11	ELECT	10uF	20%	16V
C415	1-163-077-00	CERAMIC CHIP	0.1uF	10%	25V
C416	1-124-584-00	ELECT	100uF	20%	10V
C418	1-124-589-11	ELECT	47uF	20%	16V
C424	1-125-559-11	CAP, DOUBLE LAYERS			0.047F
C425	1-163-077-00	CERAMIC CHIP	0.1uF	10%	25V
C426	1-124-584-00	ELECT	100uF	20%	10V
C427	1-124-589-11	ELECT	47uF	20%	16V
C428	1-124-555-00	ELECT	1000uF	20%	16V
C429	1-124-556-11	ELECT	2200uF	20%	16V
C430	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C431	1-124-589-11	ELECT	47uF	20%	16V
C432	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C434	1-163-077-00	CERAMIC CHIP	0.1uF	10%	25V
C435	1-163-077-00	CERAMIC CHIP	0.1uF	10%	25V
C436	1-163-077-00	CERAMIC CHIP	0.1uF	10%	25V
C437	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C439	1-163-077-00	CERAMIC CHIP	0.1uF	10%	25V
C440	1-163-077-00	CERAMIC CHIP	0.1uF	10%	25V
C441	1-163-077-00	CERAMIC CHIP	0.1uF	10%	25V
C443	1-163-077-00	CERAMIC CHIP	0.1uF	10%	25V
C502	1-163-267-00	CERAMIC CHIP	470PF	5%	50V
C503	1-128-299-11	ELECT	180uF	20%	16V
C504	1-128-292-11	ELECT	220uF	20%	10V
C505	1-126-247-11	ELECT	560uF	20%	6.3V
C506	1-162-638-11	CERAMIC CHIP	1uF		16V
C507	1-162-638-11	CERAMIC CHIP	1uF		16V
C508	1-161-894-00	CERAMIC CHIP	0.1uF		
C509	1-102-110-00	CERAMIC CHIP	220P		
C510	1-102-108-00	CERAMIC CHIP	150P		

MAIN

Ref.No.	Part No.	Description	Remark
		< CONNECTOR >	
CN101	1-566-531-11	CONNECTOR, FPC (ZIF) 15P	
CN102	1-566-531-11	CONNECTOR, FPC (ZIF) 15P	
* CN103	1-573-042-11	HOUSING, CONNECTOR 9P	
* CN104	1-565-450-21	SOCKET, CONNECTOR 28P	
* CN105	1-566-005-11	PIN, CONNECTOR (PC BOARD) 8P	
* CN106	1-506-984-11	PIN, CONNECTOR (PC BOARD) 2P	
CN107	1-565-517-11	CONNECTOR	
		< DIODE >	
D103	8-719-200-82	DIODE 11ES2	
D104	8-719-200-82	DIODE 11ES2	
D151	8-719-911-19	DIODE 1SS119	
D152	8-719-911-19	DIODE 1SS119	
D153	8-719-911-19	DIODE 1SS119	
D154	8-719-911-19	DIODE 1SS119	
D251	8-719-911-19	DIODE 1SS119	
D252	8-719-911-19	DIODE 1SS119	
D253	8-719-911-19	DIODE 1SS119	
D254	8-719-911-19	DIODE 1SS119	
D301	8-719-911-19	DIODE 1SS119	
D302	8-719-911-19	DIODE 1SS119	
D303	8-719-911-19	DIODE 1SS119	
D304	8-719-911-19	DIODE 1SS119	
D305	8-719-109-84	DIODE RD5.1ES-B1	
D306	8-719-911-19	DIODE 1SS119	
D401	8-719-911-19	DIODE 1SS119	
D402	8-719-911-19	DIODE 1SS119	
D403	8-719-911-19	DIODE 1SS119	
D404	8-719-911-19	DIODE 1SS119	
D405	8-719-911-19	DIODE 1SS119	
D407	8-719-109-90	DIODE RD5.6ES-B3	
D408	8-719-200-82	DIODE 11ES2	
D409	8-719-109-84	DIODE RD5.1ES-B1	
D410	8-719-200-82	DIODE 11ES2	
D411	8-719-109-90	DIODE RD5.6ES-B3	
D412	8-719-200-82	DIODE 11ES2	
D413	8-719-200-82	DIODE 11ES2	
D414	8-719-989-62	DIODE RLS254	
		< FUSE >	
F401	1-532-731-11	FUSE (BRADE TYPE) (AUTO FUSE)	
		< HOLDER >	
FH401	1-533-179-11	HOLDER, FUSE	

Ref.No.	Part No.	Description	Remark
		< IC >	
IC101	8-759-504-68	IC SM5807ES	
IC102	8-759-983-79	IC PCM66P	
IC151	8-759-981-XX	IC RC4560M-T1	
IC152	8-759-981-XX	IC RC4560M-T1	
IC153	8-759-981-XX	IC RC4560M-T1	
IC251	8-759-981-XX	IC RC4560M-T1	
IC253	8-759-981-XX	IC RC4560M-T1	
IC301	8-759-067-69	IC uPD75512GF-139-3B9	
IC302	8-759-940-45	IC S-8054HN-CB	
IC401	8-759-940-45	IC S-8054HN-CB	
IC501	8-759-067-71	IC MC33063ADL	
IC502	8-759-052-52	IC L78M05T-FA	
		< JUMPER >	
JR319	1-216-295-00	METAL CHIP 0 5% 1/10W	
		< COIL >	
L301	1-410-977-11	INDUCTOR 100uH	
L401	1-410-171-11	INDUCTOR 1mH	
L402	1-410-977-11	INDUCTOR 100uH	
* L404	1-424-507-11	COIL, CHOKE 1.4mH	
L501	1-414-003-11	COIL, CHOKE 150uH	
L502	1-414-002-11	COIL, CHOKE 33uH	
		< TRANSISTOR >	
Q101	8-729-901-04	TRANSISTOR DTA114EK	
Q151	8-729-920-31	TRANSISTOR DTC343TK	
Q152	8-729-920-53	TRANSISTOR FMY1	
Q153	8-729-106-68	TRANSISTOR 2SD1615A-GP	
Q154	8-729-106-60	TRANSISTOR 2SB1115A	
Q155	8-729-920-53	TRANSISTOR FMY1	
Q156	8-729-106-68	TRANSISTOR 2SD1615A-GP	
Q157	8-729-106-60	TRANSISTOR 2SB1115A	
Q251	8-729-920-31	TRANSISTOR DTC343TK	
Q252	8-729-920-53	TRANSISTOR FMY1	
Q253	8-729-106-68	TRANSISTOR 2SD1615A-GP	
Q254	8-729-106-60	TRANSISTOR 2SB1115A	
Q255	8-729-920-53	TRANSISTOR FMY1	
Q256	8-729-106-68	TRANSISTOR 2SD1615A-GP	
Q257	8-729-106-60	TRANSISTOR 2SB1115A	
Q301	8-729-901-04	TRANSISTOR DTA114EK	
Q302	8-729-900-53	TRANSISTOR DTC114EK	
Q303	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q401	8-729-900-53	TRANSISTOR DTC114EK	
Q402	8-729-820-60	TRANSISTOR 2SB1124-S	
Q403	8-729-820-60	TRANSISTOR 2SB1124-S	

MAIN

Ref.No.	Part No.	Description	Remark
Q404	8-729-808-41	TRANSISTOR 2SD1624-S	
Q405	8-729-808-41	TRANSISTOR 2SD1624-S	
Q406	8-729-881-21	TRANSISTOR 2SC2812-L5	
Q407	8-729-903-10	TRANSISTOR FMW1	
Q408	8-729-904-51	TRANSISTOR DTB123EK	
Q409	8-729-900-53	TRANSISTOR DTC114EK	
Q410	8-729-900-53	TRANSISTOR DTC114EK	
Q411	8-729-904-69	TRANSISTOR DTD123EK	
Q412	8-729-900-53	TRANSISTOR DTC114EK	
Q414	8-729-820-60	TRANSISTOR 2SB1124-S	
Q415	8-729-216-22	TRANSISTOR 2SA1162	
Q416	8-729-903-10	TRANSISTOR FMW1	
Q417	8-729-820-60	TRANSISTOR 2SB1124-S	
Q418	8-729-216-22	TRANSISTOR 2SA1162	
Q419	8-729-903-10	TRANSISTOR FMW1	
Q420	8-729-820-60	TRANSISTOR 2SB1124-S	
Q421	8-729-216-22	TRANSISTOR 2SA1162	
Q422	8-729-900-53	TRANSISTOR DTC114EK	
Q423	8-729-900-53	TRANSISTOR DTC114EK	
Q424	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q425	8-729-881-21	TRANSISTOR 2SC2812-L5	
Q426	8-729-881-21	TRANSISTOR 2SC2812-L5	
Q428	8-729-821-62	TRANSISTOR 2SB1203FAS	
Q429	8-729-808-41	TRANSISTOR 2SD1624-S	
Q431	8-729-820-60	TRANSISTOR 2SB1124-S	
Q501	8-729-900-53	TRANSISTOR DTC114EK	
Q502	8-729-900-53	TRANSISTOR DTC114EK	
Q503	8-729-821-62	TRANSISTOR 2SB1203FAS	

< RESISTOR >

Ref.No.	Part No.	Description			Remark
R101	1-216-041-00	METAL CHIP	470	5%	1/10W
R102	1-216-041-00	METAL CHIP	470	5%	1/10W
R103	1-216-041-00	METAL CHIP	470	5%	1/10W
R104	1-216-025-00	METAL CHIP	100	5%	1/10W
R151	1-216-121-00	METAL CHIP	1M	5%	1/10W
R152	1-216-097-00	METAL CHIP	100K	5%	1/10W
R153	1-216-071-00	METAL CHIP	8.2K	5%	1/10W
R154	1-216-073-00	METAL CHIP	10K	5%	1/10W
R155	1-216-077-00	METAL CHIP	15K	5%	1/10W
R156	1-216-073-00	METAL CHIP	10K	5%	1/10W
R157	1-216-083-00	METAL CHIP	27K	5%	1/10W
R158	1-216-097-00	METAL CHIP	100K	5%	1/10W
R159	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R160	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R161	1-216-073-00	METAL CHIP	10K	5%	1/10W
R162	1-216-073-00	METAL CHIP	10K	5%	1/10W
R163	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R164	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R165	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R166	1-216-001-00	METAL CHIP	10	5%	1/10W
R167	1-216-001-00	METAL CHIP	10	5%	1/10W
R168	1-216-001-00	METAL CHIP	10	5%	1/10W
R169	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R170	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R171	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R172	1-216-001-00	METAL CHIP	10	5%	1/10W
R173	1-216-001-00	METAL CHIP	10	5%	1/10W
R174	1-216-001-00	METAL CHIP	10	5%	1/10W
R175	1-216-198-00	METAL CHIP	1K	5%	1/8W
R176	1-216-073-00	METAL CHIP	10K	5%	1/10W
R251	1-216-121-00	METAL CHIP	1M	5%	1/10W
R252	1-216-097-00	METAL CHIP	100K	5%	1/10W
R253	1-216-071-00	METAL CHIP	8.2K	5%	1/10W
R254	1-216-073-00	METAL CHIP	10K	5%	1/10W
R255	1-216-077-00	METAL CHIP	15K	5%	1/10W
R256	1-216-073-00	METAL CHIP	10K	5%	1/10W
R257	1-216-083-00	METAL CHIP	27K	5%	1/10W
R258	1-216-097-00	METAL CHIP	100K	5%	1/10W
R259	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R260	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R261	1-216-073-00	METAL CHIP	10K	5%	1/10W
R262	1-216-073-00	METAL CHIP	10K	5%	1/10W
R263	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R264	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R265	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R266	1-216-001-00	METAL CHIP	10	5%	1/10W
R267	1-216-001-00	METAL CHIP	10	5%	1/10W
R268	1-216-001-00	METAL CHIP	10	5%	1/10W
R269	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R270	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R271	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R272	1-216-001-00	METAL CHIP	10	5%	1/10W
R273	1-216-001-00	METAL CHIP	10	5%	1/10W
R274	1-216-001-00	METAL CHIP	10	5%	1/10W
R275	1-216-198-00	METAL CHIP	1K	5%	1/8W
R276	1-216-073-00	METAL CHIP	10K	5%	1/10W
R301	1-216-041-00	METAL CHIP	470	5%	1/10W
R302	1-216-041-00	METAL CHIP	470	5%	1/10W
R303	1-216-041-00	METAL CHIP	470	5%	1/10W
R304	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R305	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R306	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R307	1-216-089-00	METAL CHIP	47K	5%	1/10W
R308	1-216-089-00	METAL CHIP	47K	5%	1/10W
R309	1-216-089-00	METAL CHIP	47K	5%	1/10W
R310	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R311	1-216-041-00	METAL CHIP	470	5%	1/10W
R312	1-216-041-00	METAL CHIP	470	5%	1/10W

Ref.No.	Part No.	Description			Remark
R313	1-216-041-00	METAL CHIP	470	5%	1/10W
R314	1-216-041-00	METAL CHIP	470	5%	1/10W
R315	1-216-041-00	METAL CHIP	470	5%	1/10W
R316	1-216-041-00	METAL CHIP	470	5%	1/10W
R317	1-216-041-00	METAL CHIP	470	5%	1/10W
R318	1-216-041-00	METAL CHIP	470	5%	1/10W
R320	1-216-041-00	METAL CHIP	470	5%	1/10W
R322	1-216-089-00	METAL CHIP	47K	5%	1/10W
R323	1-216-089-00	METAL CHIP	47K	5%	1/10W
R324	1-216-089-00	METAL CHIP	47K	5%	1/10W
R325	1-216-089-00	METAL CHIP	47K	5%	1/10W
R326	1-216-089-00	METAL CHIP	47K	5%	1/10W
R327	1-216-089-00	METAL CHIP	47K	5%	1/10W
R328	1-216-089-00	METAL CHIP	47K	5%	1/10W
R329	1-216-089-00	METAL CHIP	47K	5%	1/10W
R330	1-216-073-00	METAL CHIP	10K	5%	1/10W
R331	1-216-073-00	METAL CHIP	10K	5%	1/10W
R332	1-216-035-00	METAL CHIP	270	5%	1/10W
R333	1-216-041-00	METAL CHIP	470	5%	1/10W
R334	1-216-041-00	METAL CHIP	470	5%	1/10W
R335	1-216-041-00	METAL CHIP	470	5%	1/10W
R336	1-216-041-00	METAL CHIP	470	5%	1/10W
R337	1-216-041-00	METAL CHIP	470	5%	1/10W
R338	1-216-041-00	METAL CHIP	470	5%	1/10W
R339	1-216-041-00	METAL CHIP	470	5%	1/10W
R340	1-216-041-00	METAL CHIP	470	5%	1/10W
R341	1-216-041-00	METAL CHIP	470	5%	1/10W
R342	1-216-041-00	METAL CHIP	470	5%	1/10W
R343	1-216-041-00	METAL CHIP	470	5%	1/10W
R344	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R345	1-216-083-00	METAL CHIP	27K	5%	1/10W
R346	1-216-089-00	METAL CHIP	47K	5%	1/10W
R401	1-216-001-00	METAL CHIP	10	5%	1/10W
R402	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R403	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R404	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R405	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R406	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R407	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R408	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R409	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R410	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R411	1-216-049-00	METAL CHIP	1K	5%	1/10W
R412	1-216-073-00	METAL CHIP	10K	5%	1/10W
R413	1-249-412-11	CARBON	390	5%	1/4W
R414	1-249-421-11	CARBON	2.2K	5%	1/4W
R421	1-216-073-00	METAL CHIP	10K	5%	1/10W
R422	1-216-073-00	METAL CHIP	10K	5%	1/10W
R423	1-216-041-00	METAL CHIP	470	5%	1/10W

Ref.No.	Part No.	Description			Remark
R424	1-216-134-00	METAL CHIP	2.2	5%	1/8W
R425	1-216-049-00	METAL CHIP	1K	5%	1/10W
R426	1-216-073-00	METAL CHIP	10K	5%	1/10W
R427	1-216-073-00	METAL CHIP	10K	5%	1/10W
R428	1-216-041-00	METAL CHIP	470	5%	1/10W
R429	1-216-134-00	METAL CHIP	2.2	5%	1/8W
R430	1-216-001-00	METAL CHIP	10	5%	1/10W
R431	1-216-001-00	METAL CHIP	10	5%	1/10W
R432	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R433	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R434	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R435	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R436	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R437	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R438	1-216-071-00	METAL CHIP	8.2K	5%	1/10W
R439	1-216-049-00	METAL CHIP	1K	5%	1/10W
R440	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R441	1-216-073-00	METAL CHIP	10K	5%	1/10W
R442	1-216-049-00	METAL CHIP	1K	5%	1/10W
R443	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R444	1-216-035-00	METAL CHIP	270	5%	1/10W
R445	1-216-025-00	METAL CHIP	100	5%	1/10W
R446	1-216-190-00	METAL GLAZE	470	5%	1/8W
R447	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R451	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R452	1-216-198-00	METAL CHIP	1K	5%	1/8W
R453	1-216-198-00	METAL CHIP	1K	5%	1/8W
R454	1-216-198-00	METAL CHIP	1K	5%	1/8W
R455	1-216-083-00	METAL CHIP	27K	5%	1/10W
R456	1-215-859-00	METAL OXIDE	22	5%	1W F
R457	1-216-134-00	METAL CHIP	2.2	5%	1/8W
R459	1-216-308-00	METAL CHIP	4.7	5%	1/10W
R460	1-216-027-00	METAL CHIP	120	5%	1/10W
R461	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R462	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R464	1-216-049-00	METAL CHIP	1K	5%	1/10W
R501	1-216-073-00	METAL CHIP	10K	5%	1/10W
R502	1-216-073-00	METAL CHIP	10K	5%	1/10W
R503	1-216-067-00	METAL CHIP	5.6K	5%	1/10W
R504	1-216-051-00	METAL CHIP	1.2K	5%	1/10W
R505	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R506	1-216-075-00	METAL CHIP	12K	5%	1/10W
R507	1-249-413-11	CARBON	470	5%	1/4W
R508	1-249-413-11	CARBON	470	5%	1/4W
R509	1-249-405-11	CARBON	100	5%	1/4W
R510	1-249-381-11	CARBON	1	5%	1/4W
R511	1-249-381-11	CARBON	1	5%	1/4W

MAIN RF

SEE ADDITIONAL INFORMATION

Ref.No.	Part No.	Description			Remark
		< RELAY >			
RY151	1-515-614-11	RELAY			
RY251	1-515-614-11	RELAY			
		< THERMISTOR >			
TH301	1-808-656-11	THERMISTOR			
		< VARISTOR >			
VDR401	1-807-601-11	VARISTOR, CERAMIC			
		< CRYSTAL >			
X101	1-567-820-11	VIBRATOR, CRYSTAL 16MHz			
X301	1-567-775-11	VIBRATOR, CERAMIC 4.19MHz			
**********					
*	A-3273-870-A	RF BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C1	1-135-166-21	TANTALUM CHIP	47uF	10%	10V
C2	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V
C3	1-126-599-11	ELECT	330uF	20%	6.3V
C4	1-163-989-11	CERAMIC CHIP	0.033uF	10%	25V
C5	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C6	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C7	1-163-078-11	CERAMIC CHIP	0.033uF	10%	25V
C8	1-163-059-00	CERAMIC CHIP	0.01uF	10%	50V
C9	1-126-593-11	ELECT CHIP	0.47uF	20%	50V
C10	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C11	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C12	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C13	1-126-593-11	ELECT CHIP	0.47uF	20%	50V
C14	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C15	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C16	1-126-590-11	ELECT CHIP	22uF	20%	4V
C17	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V
C18	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C19	1-163-989-11	CERAMIC CHIP	0.033uF	10%	25V
C20	1-126-592-11	ELECT CHIP	4.7uF	20%	16V
C21	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C22	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C23	1-126-591-11	ELECT CHIP	10uF	20%	6.3V
C24	1-126-594-11	ELECT CHIP	1uF	20%	50V
C25	1-126-594-11	ELECT CHIP	1uF	20%	50V
C26	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C27	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C29	1-126-590-11	ELECT CHIP	22uF	20%	4V
C30	1-126-590-11	ELECT CHIP	22uF	20%	4V
C31	1-126-590-11	ELECT CHIP	22uF	20%	4V
C34	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C35	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V
C36	1-126-592-11	ELECT CHIP	4.7uF	20%	16V
C37	1-126-591-11	ELECT CHIP	10uF	20%	6.3V
C38	1-162-638-11	CERAMIC CHIP	1uF		16V
C39	1-162-638-11	CERAMIC CHIP	1uF		16V
C40	1-126-176-11	ELECT	220uF	20%	10V
C99	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
		< CONNECTOR >			
CNJ11	1-568-141-11	HOUSING, CONNECTOR 5P			
CNJ12	1-568-142-11	HOUSING, CONNECTOR 13P			
CNJ13	1-566-531-11	CONNECTOR, FPC (ZIF) 15P			
CNJ14	1-566-531-11	CONNECTOR, FPC (ZIF) 15P			
* CNP10	1-506-990-11	PIN, CONNECTOR (PC BOARD) 8P			
		< IC >			
IC1	8-752-033-14	IC CXA1081Q			
IC2	8-752-037-50	IC CXA1082BQ			
IC3	8-752-341-93	IC CXD1167Q			
IC4	8-759-821-76	IC LA6533			
IC5	8-759-821-76	IC LA6533			
		< JUMPER >			
JR1	1-216-296-00	METAL CHIP	0	5%	1/8W
JR2	1-216-296-00	METAL CHIP	0	5%	1/8W
JR3	1-216-296-00	METAL CHIP	0	5%	1/8W
JR4	1-216-296-00	METAL CHIP	0	5%	1/8W
JR5	1-216-296-00	METAL CHIP	0	5%	1/8W
JR6	1-216-296-00	METAL CHIP	0	5%	1/8W
JR7	1-216-296-00	METAL CHIP	0	5%	1/8W
JR8	1-216-296-00	METAL CHIP	0	5%	1/8W
JR9	1-216-296-00	METAL CHIP	0	5%	1/8W
JR10	1-216-296-00	METAL CHIP	0	5%	1/8W
JR11	1-216-296-00	METAL CHIP	0	5%	1/8W
JR12	1-216-296-00	METAL CHIP	0	5%	1/8W
JR13	1-216-296-00	METAL CHIP	0	5%	1/8W
JR14	1-216-296-00	METAL CHIP	0	5%	1/8W
JR15	1-216-296-00	METAL CHIP	0	5%	1/8W
JR16	1-216-296-00	METAL CHIP	0	5%	1/8W
JR17	1-216-296-00	METAL CHIP	0	5%	1/8W
JR18	1-216-296-00	METAL CHIP	0	5%	1/8W
JR19	1-216-296-00	METAL CHIP	0	5%	1/8W
JR20	1-216-296-00	METAL CHIP	0	5%	1/8W
JR21	1-216-296-00	METAL CHIP	0	5%	1/8W
JR22	1-216-296-00	METAL CHIP	0	5%	1/8W
JR23	1-216-296-00	METAL CHIP	0	5%	1/8W
JR24	1-216-296-00	METAL CHIP	0	5%	1/8W
JR25	1-216-296-00	METAL CHIP	0	5%	1/8W

SEE ADDITIONAL INFORMATION

RF

Ref.No.	Part No.	Description			Remark
JR26	1-216-296-00	METAL CHIP	0	5%	1/8W
JR27	1-216-296-00	METAL CHIP	0	5%	1/8W
JR28	1-216-296-00	METAL CHIP	0	5%	1/8W
JR29	1-216-296-00	METAL CHIP	0	5%	1/8W
JR30	1-216-296-00	METAL CHIP	0	5%	1/8W
JR31	1-216-296-00	METAL CHIP	0	5%	1/8W
JR32	1-216-296-00	METAL CHIP	0	5%	1/8W
JR33	1-216-296-00	METAL CHIP	0	5%	1/8W
JR34	1-216-296-00	METAL CHIP	0	5%	1/8W
JR35	1-216-296-00	METAL CHIP	0	5%	1/8W
JR36	1-216-296-00	METAL CHIP	0	5%	1/8W
JR37	1-216-296-00	METAL CHIP	0	5%	1/8W
JR38	1-216-296-00	METAL CHIP	0	5%	1/8W
JR39	1-216-296-00	METAL CHIP	0	5%	1/8W
JR40	1-216-296-00	METAL CHIP	0	5%	1/8W
JR41	1-216-296-00	METAL CHIP	0	5%	1/8W
JR42	1-216-296-00	METAL CHIP	0	5%	1/8W
JR43	1-216-296-00	METAL CHIP	0	5%	1/8W
JR44	1-216-296-00	METAL CHIP	0	5%	1/8W
JR45	1-216-296-00	METAL CHIP	0	5%	1/8W
JR46	1-216-296-00	METAL CHIP	0	5%	1/8W
JR47	1-216-296-00	METAL CHIP	0	5%	1/8W
JR48	1-216-295-00	METAL CHIP	0	5%	1/10W
JR49	1-216-295-00	METAL CHIP	0	5%	1/10W
JR50	1-216-296-00	METAL CHIP	0	5%	1/8W
JR51	1-216-295-00	METAL CHIP	0	5%	1/10W
JR52	1-216-295-00	METAL CHIP	0	5%	1/10W
JR53	1-216-295-00	METAL CHIP	0	5%	1/10W
JR54	1-216-295-00	METAL CHIP	0	5%	1/10W
JR55	1-216-295-00	METAL CHIP	0	5%	1/10W
JR56	1-216-295-00	METAL CHIP	0	5%	1/10W
JR57	1-216-295-00	METAL CHIP	0	5%	1/10W
JR58	1-216-295-00	METAL CHIP	0	5%	1/10W
JR59	1-216-295-00	METAL CHIP	0	5%	1/10W
JR60	1-216-295-00	METAL CHIP	0	5%	1/10W
JR61	1-216-295-00	METAL CHIP	0	5%	1/10W
JR62	1-216-295-00	METAL CHIP	0	5%	1/10W
JR63	1-216-295-00	METAL CHIP	0	5%	1/10W
JR64	1-216-295-00	METAL CHIP	0	5%	1/10W
JR65	1-216-295-00	METAL CHIP	0	5%	1/10W
JR66	1-216-295-00	METAL CHIP	0	5%	1/10W
JR67	1-216-295-00	METAL CHIP	0	5%	1/10W
JR68	1-216-295-00	METAL CHIP	0	5%	1/10W
JR69	1-216-295-00	METAL CHIP	0	5%	1/10W
JR70	1-216-295-00	METAL CHIP	0	5%	1/10W
		< COIL >			
L1	1-410-381-11	INDUCTOR CHIP	10uH		
L2	1-410-375-11	INDUCTOR CHIP	3.3uH		

Ref.No.	Part No.	Description			Remark
		< TRANSISTOR >			
Q1	8-729-900-53	TRANSISTOR	DTC114EK		
Q2	8-729-900-53	TRANSISTOR	DTC114EK		
Q3	8-729-900-53	TRANSISTOR	DTC114EK		
Q4	8-729-141-48	TRANSISTOR	2SB624-BV345		
		< RESISTOR >			
R1	1-216-150-00	METAL GLAZE	10	5%	1/8W
R2	1-216-081-00	METAL CHIP	22K	5%	1/10W
R3	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R4	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R5	1-216-081-00	METAL CHIP	22K	5%	1/10W
R6	1-216-206-00	METAL GLAZE	2.2K	5%	1/8W
R7	1-216-097-00	METAL CHIP	100K	5%	1/10W
R8	1-216-073-00	METAL CHIP	10K	5%	1/10W
R9	1-216-073-00	METAL CHIP	10K	5%	1/10W
R10	1-216-073-00	METAL CHIP	10K	5%	1/10W
R11	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R12	1-216-105-00	METAL CHIP	220K	5%	1/10W
R13	1-216-121-00	METAL CHIP	1M	5%	1/10W
R14	1-216-105-00	METAL CHIP	220K	5%	1/10W
R15	1-216-085-00	METAL CHIP	33K	5%	1/10W
R16	1-216-085-00	METAL CHIP	33K	5%	1/10W
R17	1-216-085-00	METAL CHIP	33K	5%	1/10W
R18	1-216-081-00	METAL CHIP	22K	5%	1/10W
R19	1-216-081-00	METAL CHIP	22K	5%	1/10W
R20	1-216-085-00	METAL CHIP	33K	5%	1/10W
R21	1-216-085-00	METAL CHIP	33K	5%	1/10W
R22	1-216-097-00	METAL CHIP	100K	5%	1/10W
R23	1-216-097-00	METAL CHIP	100K	5%	1/10W
R24	1-216-103-00	METAL CHIP	180K	5%	1/10W
R25	1-216-210-00	METAL GLAZE	3.3K	5%	1/8W
R26	1-216-085-00	METAL CHIP	33K	5%	1/10W
R27	1-216-085-00	METAL CHIP	33K	5%	1/10W
R28	1-216-081-00	METAL CHIP	22K	5%	1/10W
R29	1-216-081-00	METAL CHIP	22K	5%	1/10W
R30	1-216-085-00	METAL CHIP	33K	5%	1/10W
R31	1-216-097-00	METAL CHIP	100K	5%	1/10W
R32	1-216-076-00	METAL CHIP	13K	5%	1/10W
R33	1-216-076-00	METAL CHIP	13K	5%	1/10W
R34	1-216-059-00	METAL CHIP	2.7K	5%	1/10W
R35	1-216-114-00	METAL GLAZE	510K	5%	1/10W
R36	1-216-059-00	METAL CHIP	2.7K	5%	1/10W
R37	1-216-103-00	METAL CHIP	180K	5%	1/10W
R38	1-216-097-00	METAL CHIP	100K	5%	1/10W
R39	1-216-097-00	METAL CHIP	100K	5%	1/10W
R40	1-216-097-00	METAL CHIP	100K	5%	1/10W
R41	1-216-073-00	METAL CHIP	10K	5%	1/10W

RF SENSOR

SEE ADDITIONAL INFORMATION

Ref.No.	Part No.	Description			Remark
R42	1-216-073-00	METAL CHIP	10K	5%	1/10W
R43	1-216-049-00	METAL CHIP	1K	5%	1/10W
R44	1-216-049-00	METAL CHIP	1K	5%	1/10W
R45	1-216-049-00	METAL CHIP	1K	5%	1/10W
R46	1-216-049-00	METAL CHIP	1K	5%	1/10W
R47	1-216-229-00	METAL GLAZE	20K	5%	1/8W
R48	1-216-214-00	METAL GLAZE	4.7K	5%	1/8W
R49	1-216-246-00	METAL GLAZE	100K	5%	1/8W
R50	1-216-085-00	METAL CHIP	33K	5%	1/10W
R51	1-216-081-00	METAL CHIP	22K	5%	1/10W
R52	1-216-081-00	METAL CHIP	22K	5%	1/10W
R53	1-216-081-00	METAL CHIP	22K	5%	1/10W
R54	1-216-081-00	METAL CHIP	22K	5%	1/10W
R55	1-216-024-00	METAL GLAZE	91	5%	1/10W
		< VARIABLE RESISTOR >			
RV1	1-237-005-11	RES, ADJ, METAL GLAZE 22K			
RV2	1-238-206-11	RES, ADJ, METAL GLAZE 47K			
RV3	1-238-665-11	RES, ADJ, CERMET 22K			
RV4	1-238-665-11	RES, ADJ, CERMET 22K			
RV5	1-238-662-11	RES, ADJ, CERMET 2.2K			
		< THERMISTOR >			
TH1	1-808-656-11	THERMISTOR			
TH2	1-808-656-11	THERMISTOR			
*	A-3273-871-A	SENSOR BOARD, COMPLETE			
		< JUMPER >			
JR90	1-216-296-00	METAL CHIP	0	5%	1/8W
JR91	1-216-296-00	METAL CHIP	0	5%	1/8W
JR92	1-216-296-00	METAL CHIP	0	5%	1/8W
		< TRANSISTOR >			
Q90	8-729-402-08	TRANSISTOR	PN147-LF		
Q91	8-729-402-08	TRANSISTOR	PN147-LF		
Q92	8-729-402-08	TRANSISTOR	PN147-LF		
		< SWITCH >			
SW90	1-554-938-11	SWITCH, LEAF (ROCK GEAR)			
SW91	1-554-938-11	SWITCH, LEAF (LIMIT)			
		MISCELLANEOUS			
3	1-466-720-11	KEY BOARD UNIT			
337	1-643-509-11	PC BOARD, (A) FLEXIBLE			
338	1-643-507-11	PC BOARD, (B) FLEXIBLE			
4	1-574-182-21	CORD (WITH CONNECTOR)			
7	1-590-797-11	CORD (WITH CONNECTOR)			
926	8-848-133-11	DEVICE, OPTICAL KSM-168AAN			
M903	A-3249-535-A	GEAR (A) ASSY (LOADING)			
PM901	1-454-461-11	SOLENOID, PLUNGER			
		ACCESSORIES & PACKING MATERIALS			
	1-574-294-11	CORD (WITH CONNECTOR)			
	3-336-617-01	BAG, PROTECTION			
*	3-367-376-01	CUSHION (L)			
*	3-367-377-01	CUSHION (R)			
SS	3-367-968-01	SCREW (M5X8)			
*	3-378-542-01	INDIVIDUAL CARTON			
	3-754-886-21	MANUAL, INSTRUCTION			
	3-754-887-01	MANUAL, FITTING			

HARDWARE LIST

#1	7-621-770-67	SCREW(+PTT 2.6X8),GROUND POINT
#3	7-621-772-08	SCREW +B 2X3
#4	7-627-552-18	SCREW,PRECISION +P 1.7X1.6
#5	7-627-553-28	SCREW,PRECISION +P 2X2.5
#6	7-627-553-37	SCREW,PRECISION +P 2X3
#7	7-627-850-57	SCREW,PRECISION +P 1.4X3.5
#8	7-627-451-57	SCREW,PRECISION +K 1.4X4
#9	7-627-451-17	SCREW,PRECISION +K 1.4X2.5
#10	7-627-554-18	SCREW,PRECISION +P 2X3.5 TYPE 1
#11	7-627-553-17	SCREW,PRECISION +P 2X2 TYPE 3
#12	7-624-106-04	STOP RING 3 TYPE -E
#13	7-624-104-04	STOP RING 2.0, TYPE -E
#14	7-627-852-17	+P 1.7X4
#15	7-685-103-19	+P 2X5 TYPE2 MON-SLIT

9-956-902-11

Sony Corporation
Mobile Electronics Group

English
92B0602-1
Printed in Japan
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Published by Customer Relations and Service Group

CDX-5N15W

SONY
SERVICE MANUAL

US Model

SUPPLEMENT-1

File this supplement with the service manual.

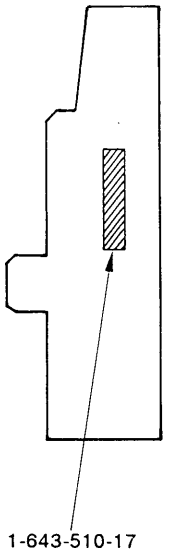
Subject: Printed circuit boards modification

(ECN-CS402542)

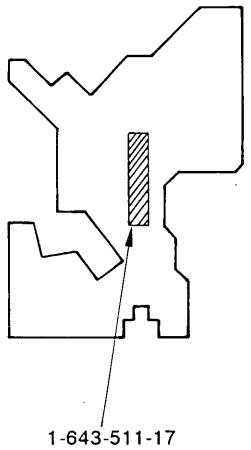
The printed circuit boards of mechanism deck have been modified in the middle of production.
This supplement-1 contains the printed wiring boards, the schematic diagram and electrical parts list for the printed circuit boards of mechanism deck.
For other information, refer to the CDX-5N15W service manual (9-956-902-11) previously issued.

- **Discrimination**

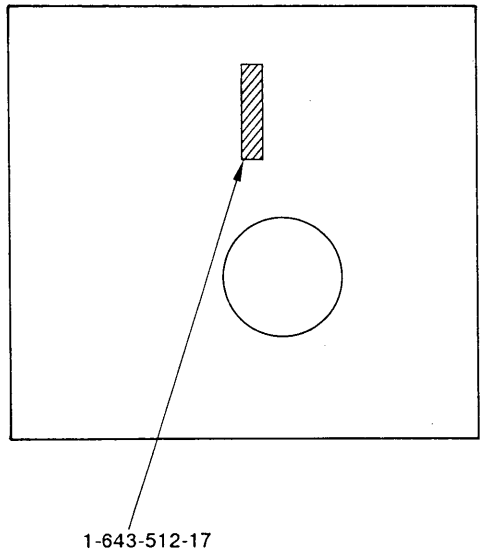
[LED BOARD]
– Component Side –



[SENSOR BOARD]
– Component Side –



[RF BOARD]
– Component Side –



ELECTRICAL PARTS LIST

Page 45, 50, 51, 52

LED **RF**

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms.
  METAL:Metal-film resistor.
  METAL OXIDE: Metal oxide-film resistor.
  F:nonflammable
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u:μ, for example:
  uA..: μA.. uPA..: μPA..
  uPB..: μPB.. uPC..: μPC.. uPD..: μPD..
- CAPACITORS
  uF: μF
- COILS
  uH: μH

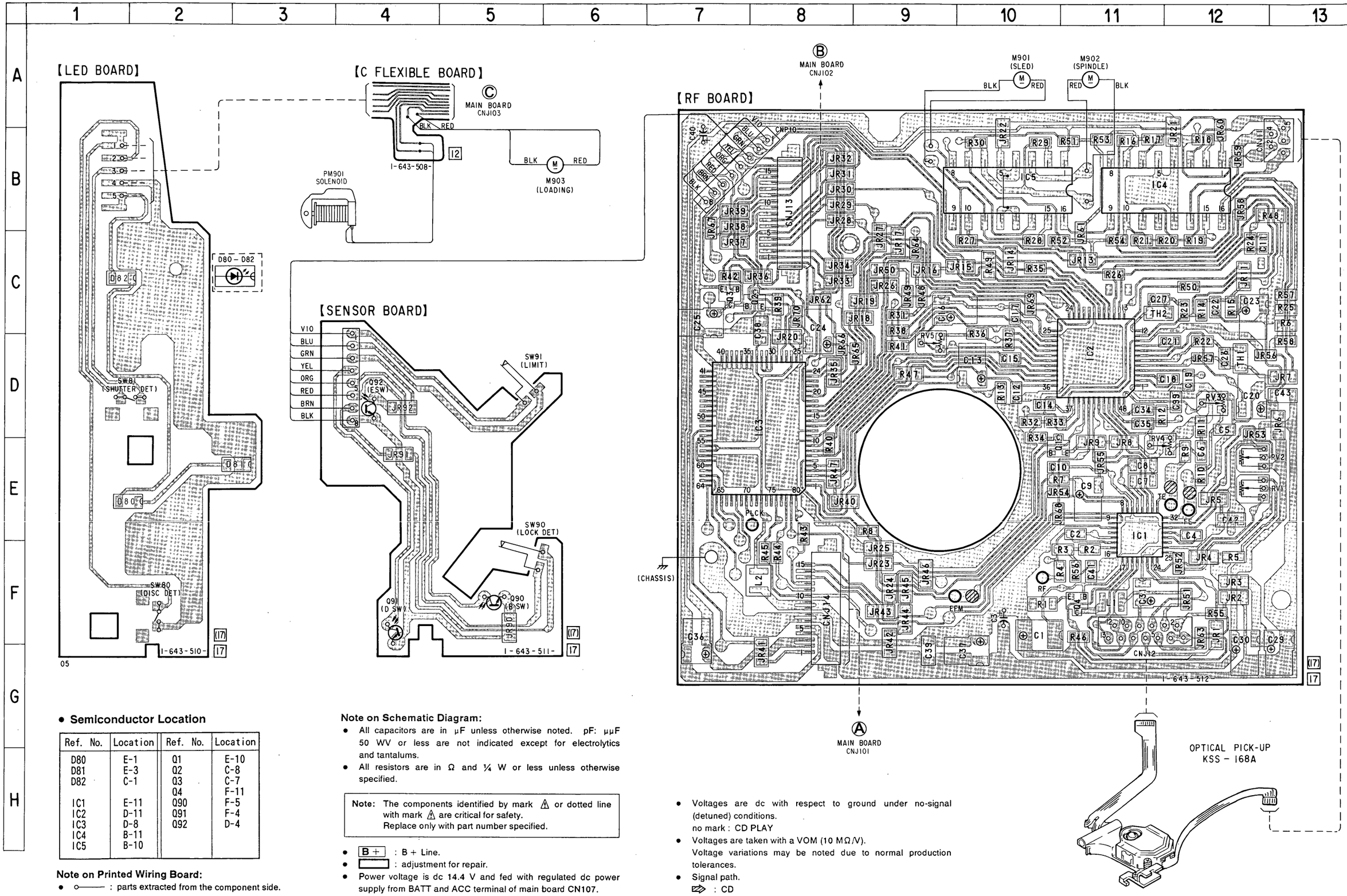
When indicating parts by reference number, please include the board.

Ref. No.	Part No.	Description			Remark
*	A-3273-869-A	LED BOARD, COMPLETE			
		**********			
	1-643-508-11	(C) FLEXIBLE BOARD			
*	3-355-252-01	SHEET (MD), INSULATING			
		< DIODE >			
D80	8-719-404-19	DIODE LN1251C			
D81	8-719-404-19	DIODE LN1251C			
D82	8-719-404-19	DIODE LN1251C			
		< SWITCH >			
SW80	1-571-754-11	SWITCH, PUSH (1 KEY) (DISC DET)			
SW81	1-571-754-11	SWITCH, PUSH (1 KEY) (SHUTTER DET)			
**********					
*	A-3273-870-A	RF BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C1	1-135-166-21	TANTALUM CHIP	47uF	10%	10V
C2	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V
C3	1-126-599-11	ELECT	330uF	20%	6.3V
C4	1-163-989-11	CERAMIC CHIP	0.033uF	10%	25V
C5	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C6	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C7	1-163-078-11	CERAMIC CHIP	0.033uF	10%	25V
C8	1-163-059-00	CERAMIC CHIP	0.01uF	10%	50V
C9	1-110-469-11	ELECT CHIP	0.47uF	20%	50V
C10	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C11	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C12	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C13	1-110-469-11	ELECT CHIP	0.47uF	20%	50V
C14	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C15	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C16	1-110-442-11	ELECT CHIP	22uF	20%	4V
C17	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V
C18	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C19	1-163-989-11	CERAMIC CHIP	0.033uF	10%	25V
C20	1-110-453-11	ELECT CHIP	4.7uF	20%	16V
C21	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C22	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C23	1-110-446-11	ELECT CHIP	10uF	20%	6.5V
C24	1-110-470-11	ELECT CHIP	1.0uF	20%	50V
C25	1-110-470-11	ELECT CHIP	1.0uF	20%	50V
C26	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C27	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C29	1-110-442-11	ELECT CHIP	22uF	20%	4V
C30	1-110-442-11	ELECT CHIP	22uF	20%	4V
C31	1-110-442-11	ELECT CHIP	22uF	20%	4V
C34	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C35	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V
C36	1-110-453-11	ELECT CHIP	4.7uF	20%	16V
C37	1-110-446-11	ELECT CHIP	10uF	20%	6.3V
C38	1-162-638-11	CERAMIC CHIP	1uF		16V
C39	1-162-638-11	CERAMIC CHIP	1uF		16V
C40	1-126-176-11	ELECT	220uF	20%	10V
C41	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C42	1-162-638-11	CERAMIC CHIP	1uF		16V
C43	1-162-638-11	CERAMIC CHIP	1uF		16V
C99	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
		< CONNECTOR >			
CNJ11	1-568-141-11	HOUSING, CONNECTOR 5P			
CNJ12	1-568-142-11	HOUSING, CONNECTOR 13P			
CNJ13	1-566-531-11	CONNECTOR, FPC (ZIF) 15P			
CNJ14	1-566-531-11	CONNECTOR, FPC (ZIF) 15P			
* CNP10	1-506-990-11	PIN, CONNECTOR (PC BOARD) 8P			
		< IC >			
IC1	8-752-033-14	IC CXA1081Q			
IC2	8-752-057-45	IC CXA1082BQ			
IC3	8-752-341-93	IC CXD1167Q			
IC4	8-759-821-76	IC LA6533			
IC5	8-759-821-76	IC LA6533			

Continued on page 7.

MECHANISM DECK SECTION PRINTED WIRING BOARDS

Page 18 to 20



• Semiconductor Location

Ref. No.	Location	Ref. No.	Location
D80	E-1	Q1	E-10
D81	E-3	Q2	C-8
D82	C-1	Q3	C-7
		Q4	F-11
IC1	E-11	Q90	F-5
IC2	D-11	Q91	F-4
IC3	D-8	Q92	D-4
IC4	B-11		
IC5	B-10		

Note on Printed Wiring Board:

- ○——— : parts extracted from the component side.

Note on Schematic Diagram:

- All capacitors are in μF unless otherwise noted. pF: μμF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and ¼ W or less unless otherwise specified.

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

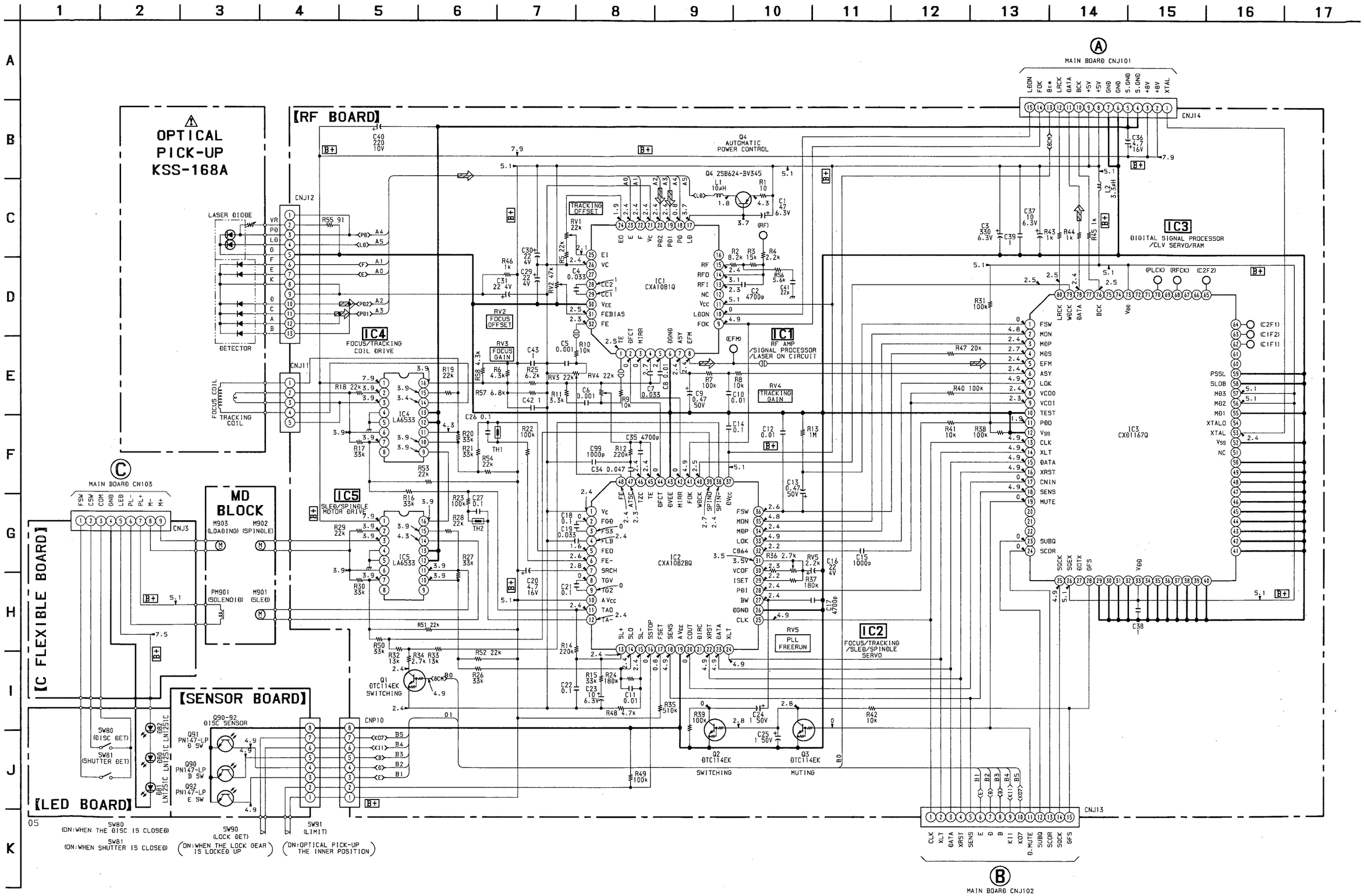
- B+ : B + Line.
- ▭ : adjustment for repair.
- Power voltage is dc 14.4 V and fed with regulated dc power supply from BATT and ACC terminal of main board CN107.

- Voltages are dc with respect to ground under no-signal (detuned) conditions.
  no mark : CD PLAY
- Voltages are taken with a VOM (10 MΩ/V).
  Voltage variations may be noted due to normal production tolerances.
- Signal path.
  ⇨ : CD

MECHANISM DECK SECTION SCHEMATIC DIAGRAM

- See page 3 for note.

Page 21 to 23



Continued from page 2.

RF

Ref. No.	Part No.	Description			Remark
		< JUMPER RESISTOR >			
JR1	1-216-296-00	METAL CHIP	0	5%	1/8W
JR2	1-216-296-00	METAL CHIP	0	5%	1/8W
JR3	1-216-296-00	METAL CHIP	0	5%	1/8W
JR4	1-216-296-00	METAL CHIP	0	5%	1/8W
JR5	1-216-296-00	METAL CHIP	0	5%	1/8W
JR6	1-216-296-00	METAL CHIP	0	5%	1/8W
JR7	1-216-296-00	METAL CHIP	0	5%	1/8W
JR8	1-216-296-00	METAL CHIP	0	5%	1/8W
JR9	1-216-296-00	METAL CHIP	0	5%	1/8W
JR11	1-216-296-00	METAL CHIP	0	5%	1/8W
JR13	1-216-296-00	METAL CHIP	0	5%	1/8W
JR14	1-216-296-00	METAL CHIP	0	5%	1/8W
JR15	1-216-296-00	METAL CHIP	0	5%	1/8W
JR16	1-216-296-00	METAL CHIP	0	5%	1/8W
JR17	1-216-296-00	METAL CHIP	0	5%	1/8W
JR18	1-216-296-00	METAL CHIP	0	5%	1/8W
JR19	1-216-296-00	METAL CHIP	0	5%	1/8W
JR20	1-216-296-00	METAL CHIP	0	5%	1/8W
JR21	1-216-296-00	METAL CHIP	0	5%	1/8W
JR22	1-216-296-00	METAL CHIP	0	5%	1/8W
JR23	1-216-296-00	METAL CHIP	0	5%	1/8W
JR24	1-216-296-00	METAL CHIP	0	5%	1/8W
JR25	1-216-296-00	METAL CHIP	0	5%	1/8W
JR26	1-216-296-00	METAL CHIP	0	5%	1/8W
JR27	1-216-296-00	METAL CHIP	0	5%	1/8W
JR28	1-216-296-00	METAL CHIP	0	5%	1/8W
JR29	1-216-296-00	METAL CHIP	0	5%	1/8W
JR30	1-216-296-00	METAL CHIP	0	5%	1/8W
JR31	1-216-296-00	METAL CHIP	0	5%	1/8W
JR32	1-216-296-00	METAL CHIP	0	5%	1/8W
JR33	1-216-296-00	METAL CHIP	0	5%	1/8W
JR34	1-216-296-00	METAL CHIP	0	5%	1/8W
JR35	1-216-296-00	METAL CHIP	0	5%	1/8W
JR36	1-216-296-00	METAL CHIP	0	5%	1/8W
JR37	1-216-296-00	METAL CHIP	0	5%	1/8W
JR38	1-216-296-00	METAL CHIP	0	5%	1/8W
JR39	1-216-296-00	METAL CHIP	0	5%	1/8W
JR40	1-216-296-00	METAL CHIP	0	5%	1/8W
JR41	1-216-296-00	METAL CHIP	0	5%	1/8W
JR42	1-216-296-00	METAL CHIP	0	5%	1/8W
JR43	1-216-296-00	METAL CHIP	0	5%	1/8W
JR44	1-216-296-00	METAL CHIP	0	5%	1/8W
JR45	1-216-296-00	METAL CHIP	0	5%	1/8W
JR46	1-216-296-00	METAL CHIP	0	5%	1/8W
JR47	1-216-296-00	METAL CHIP	0	5%	1/8W
JR48	1-216-295-00	METAL CHIP	0	5%	1/10W
JR49	1-216-295-00	METAL CHIP	0	5%	1/10W
JR50	1-216-296-00	METAL CHIP	0	5%	1/8W
JR51	1-216-295-00	METAL CHIP	0	5%	1/10W
JR52	1-216-295-00	METAL CHIP	0	5%	1/10W
JR53	1-216-295-00	METAL CHIP	0	5%	1/10W
JR54	1-216-295-00	METAL CHIP	0	5%	1/10W
JR55	1-216-295-00	METAL CHIP	0	5%	1/10W
JR56	1-216-295-00	METAL CHIP	0	5%	1/10W
JR57	1-216-295-00	METAL CHIP	0	5%	1/10W
JR58	1-216-295-00	METAL CHIP	0	5%	1/10W
JR59	1-216-295-00	METAL CHIP	0	5%	1/10W
JR60	1-216-295-00	METAL CHIP	0	5%	1/10W
JR61	1-216-295-00	METAL CHIP	0	5%	1/10W
JR62	1-216-295-00	METAL CHIP	0	5%	1/10W
JR63	1-216-295-00	METAL CHIP	0	5%	1/10W
JR64	1-216-295-00	METAL CHIP	0	5%	1/10W
JR65	1-216-295-00	METAL CHIP	0	5%	1/10W
JR66	1-216-295-00	METAL CHIP	0	5%	1/10W
JR67	1-216-295-00	METAL CHIP	0	5%	1/10W
JR68	1-216-295-00	METAL CHIP	0	5%	1/10W
JR69	1-216-295-00	METAL CHIP	0	5%	1/10W
JR70	1-216-295-00	METAL CHIP	0	5%	1/10W
		< COIL >			
L1	1-410-381-11	INDUCTOR CHIP	10uH		
L2	1-410-375-11	INDUCTOR CHIP	3.3uH		
		< TRANSISTOR >			
Q1	8-729-900-53	TRANSISTOR	DTC114EK		
Q2	8-729-900-53	TRANSISTOR	DTC114EK		
Q3	8-729-900-53	TRANSISTOR	DTC114EK		
Q4	8-729-141-48	TRANSISTOR	2SB624-BV345		
		< RESISTOR >			
R1	1-216-150-00	METAL CHIP	10	5%	1/8W
R2	1-216-071-00	METAL CHIP	8.2K	5%	1/10W
R3	1-216-077-00	METAL CHIP	15K	5%	1/10W
R4	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R5	1-216-081-00	METAL CHIP	22K	5%	1/10W
R6	1-216-666-11	METAL CHIP	4.3K	0.5%	1/10W
R7	1-216-097-00	METAL CHIP	100K	5%	1/10W
R8	1-216-073-00	METAL CHIP	10K	5%	1/10W
R9	1-216-073-00	METAL CHIP	10K	5%	1/10W
R10	1-216-073-00	METAL CHIP	10K	5%	1/10W
R11	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R12	1-216-105-00	METAL CHIP	220K	5%	1/10W
R13	1-216-121-00	METAL CHIP	1M	5%	1/10W
R14	1-216-105-00	METAL CHIP	220K	5%	1/10W
R15	1-216-085-00	METAL CHIP	33K	5%	1/10W

RF SENSOR

Ref. No.	Part No.	Description			Remark
R16	1-216-687-11	METAL CHIP	33K	0.5%	1/10W
R17	1-216-085-00	METAL CHIP	33K	5%	1/10W
R18	1-216-081-00	METAL CHIP	22K	5%	1/10W
R19	1-216-081-00	METAL CHIP	22K	5%	1/10W
R20	1-216-085-00	METAL CHIP	33K	5%	1/10W
R21	1-216-085-00	METAL CHIP	33K	5%	1/10W
R22	1-216-097-00	METAL CHIP	100K	5%	1/10W
R23	1-216-097-00	METAL CHIP	100K	5%	1/10W
R24	1-216-103-00	METAL CHIP	180K	5%	1/10W
R25	1-208-801-11	METAL CHIP	6.2K	0.50%	1/10W
R26	1-216-085-00	METAL CHIP	33K	5%	1/10W
R27	1-216-085-00	METAL CHIP	33K	5%	1/10W
R28	1-216-081-00	METAL CHIP	22K	5%	1/10W
R29	1-216-081-00	METAL CHIP	22K	5%	1/10W
R30	1-216-085-00	METAL CHIP	33K	5%	1/10W
R31	1-216-097-00	METAL CHIP	100K	5%	1/10W
R32	1-216-076-00	METAL CHIP	13K	5%	1/10W
R33	1-216-076-00	METAL CHIP	13K	5%	1/10W
R34	1-216-059-00	METAL CHIP	2.7K	5%	1/10W
R35	1-216-114-00	METAL CHIP	510K	5%	1/10W
R36	1-216-059-00	METAL CHIP	2.7K	5%	1/10W
R37	1-216-103-00	METAL CHIP	180K	5%	1/10W
R38	1-216-097-00	METAL CHIP	100K	5%	1/10W
R39	1-216-097-00	METAL CHIP	100K	5%	1/10W
R40	1-216-097-00	METAL CHIP	100K	5%	1/10W
R41	1-216-073-00	METAL CHIP	10K	5%	1/10W
R42	1-216-073-00	METAL CHIP	10K	5%	1/10W
R43	1-216-049-00	METAL CHIP	1K	5%	1/10W
R44	1-216-049-00	METAL CHIP	1K	5%	1/10W
R45	1-216-049-00	METAL CHIP	1K	5%	1/10W
R46	1-216-049-00	METAL CHIP	1K	5%	1/10W
R47	1-216-229-00	METAL CHIP	20K	5%	1/8W
R48	1-216-214-00	METAL CHIP	4.7K	5%	1/8W
R49	1-216-246-00	METAL CHIP	100K	5%	1/8W
R50	1-216-085-00	METAL CHIP	33K	5%	1/10W
R51	1-216-081-00	METAL CHIP	22K	5%	1/10W
R52	1-216-081-00	METAL CHIP	22K	5%	1/10W
R53	1-208-814-11	METAL CHIP	22K	0.50%	1/10W
R54	1-216-081-00	METAL CHIP	22K	5%	1/10W
R55	1-216-024-00	METAL CHIP	91	5%	1/10W
R56	1-216-067-00	METAL CHIP	5.6K	5%	1/10W
R57	1-216-671-11	METAL CHIP	6.8K	0.5%	1/10W
R58	1-216-666-11	METAL CHIP	4.3K	0.5%	1/10W

Ref. No.	Part No.	Description			Remark
		< VARIABLE RESISTOR >			
RV1	1-237-119-11	RES, ADJ, METAL GLAZE 22K			
RV2	1-238-206-11	RES, ADJ, METAL GLAZE 47K			
RV3	1-238-665-21	RES, ADJ, CERMET 22K			
RV4	1-238-665-21	RES, ADJ, CERMET 22K			
RV5	1-238-662-11	RES, ADJ, CERMET 2.2K			
		< THERMISTOR >			
TH1	1-808-656-11	THERMISTOR			
TH2	1-808-656-11	THERMISTOR			
**********					
*	A-3273-871-A	SENSOR BOARD, COMPLETE			
		**********			
		< JUMPER RESISTOR >			
JR90	1-216-296-00	METAL CHIP	0	5%	1/8W
JR91	1-216-296-00	METAL CHIP	0	5%	1/8W
JR92	1-216-296-00	METAL CHIP	0	5%	1/8W
		< TRANSISTOR >			
Q90	8-729-017-82	TRANSISTOR	PN147-LP-R		
Q91	8-729-017-82	TRANSISTOR	PN147-LP-R		
Q92	8-729-017-82	TRANSISTOR	PN147-LP-R		
		< SWITCH >			
SW90	1-554-938-21	SWITCH, LEAF (1KEY) (LOCK DET)			
SW91	1-554-938-21	SWITCH, LEAF (1KEY) (LIMIT)			
**********					

English
95D05016-1
Printed in Japan
© 1995. 4

9-956-902-81

Sony Corporation
Mobile Electronics Company

Published by Home A&V Products Div.
Quality Engineering Dept.

CDX-5N15W

SONY
SERVICE MANUAL

US Model

SUPPLEMENT-2

File this supplement with the service manual.

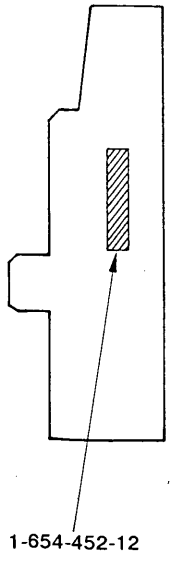
Subject: Modification of Mechanism Deck

(ECN-CS500003)

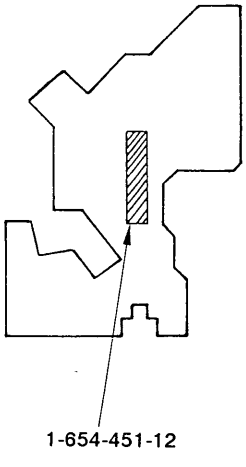
The mechanism deck have been changed to MG-200P-33 from MG-200M-33 in the middle of production.
This supplement-2 contains the printed wiring boards, the schematic diagram and electrical parts list for the mechanism deck.
For other information, refer to the CDX-5N15W service manual (9-956-902-11) previously issued.

- **Discrimination**

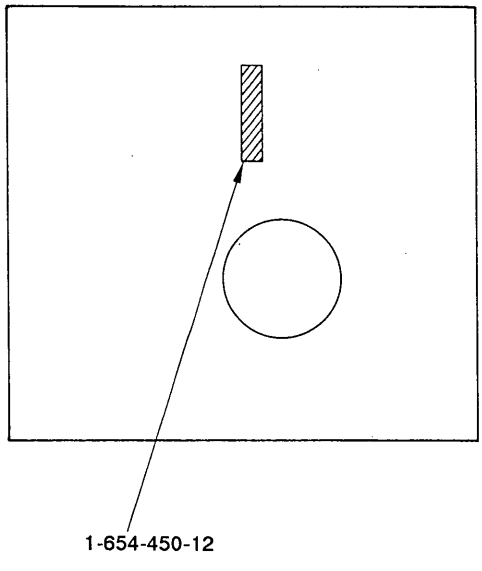
[LED BOARD]
– Component Side –



[SENSOR BOARD]
– Component Side –



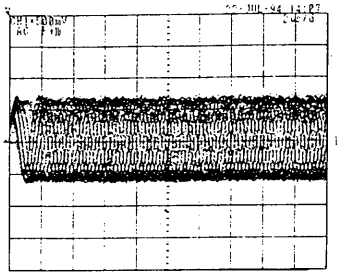
[RF BOARD]
– Component Side –



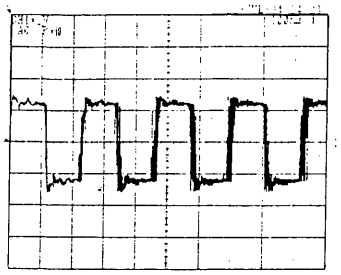
• Waveforms

RF Board

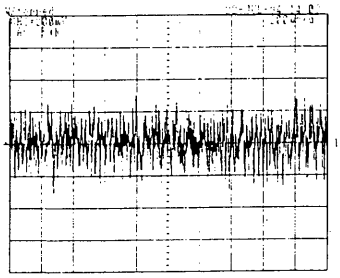
❸ TP RF 500mV/DIV 2 μs/DIV



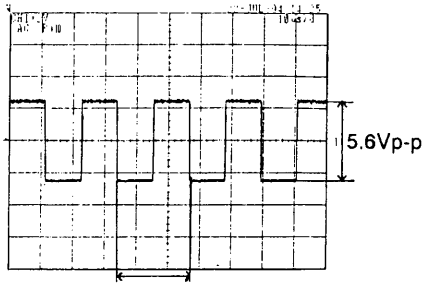
❽ IC3 ⑩ 2V/DIV 100ns/DIV



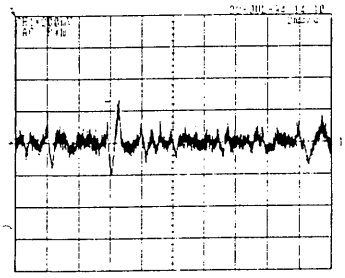
❹ IC1 ① 200mV/DIV 200 μs/DIV



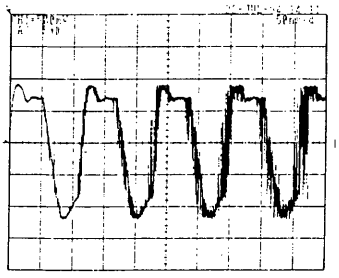
❾ IC3 ⑧⓪



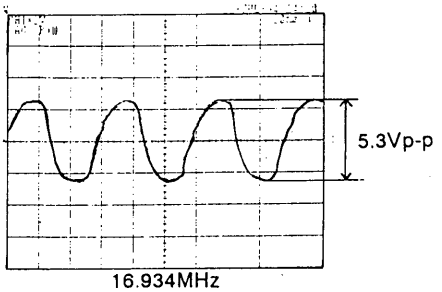
❺ IC1 ㉜ 200mV/DIV 2ms/DIV



❻ IC3 ⑨ 500mV/DIV 50ns/DIV



❼ IC3 ㊸



Note on Schematic Diagram:

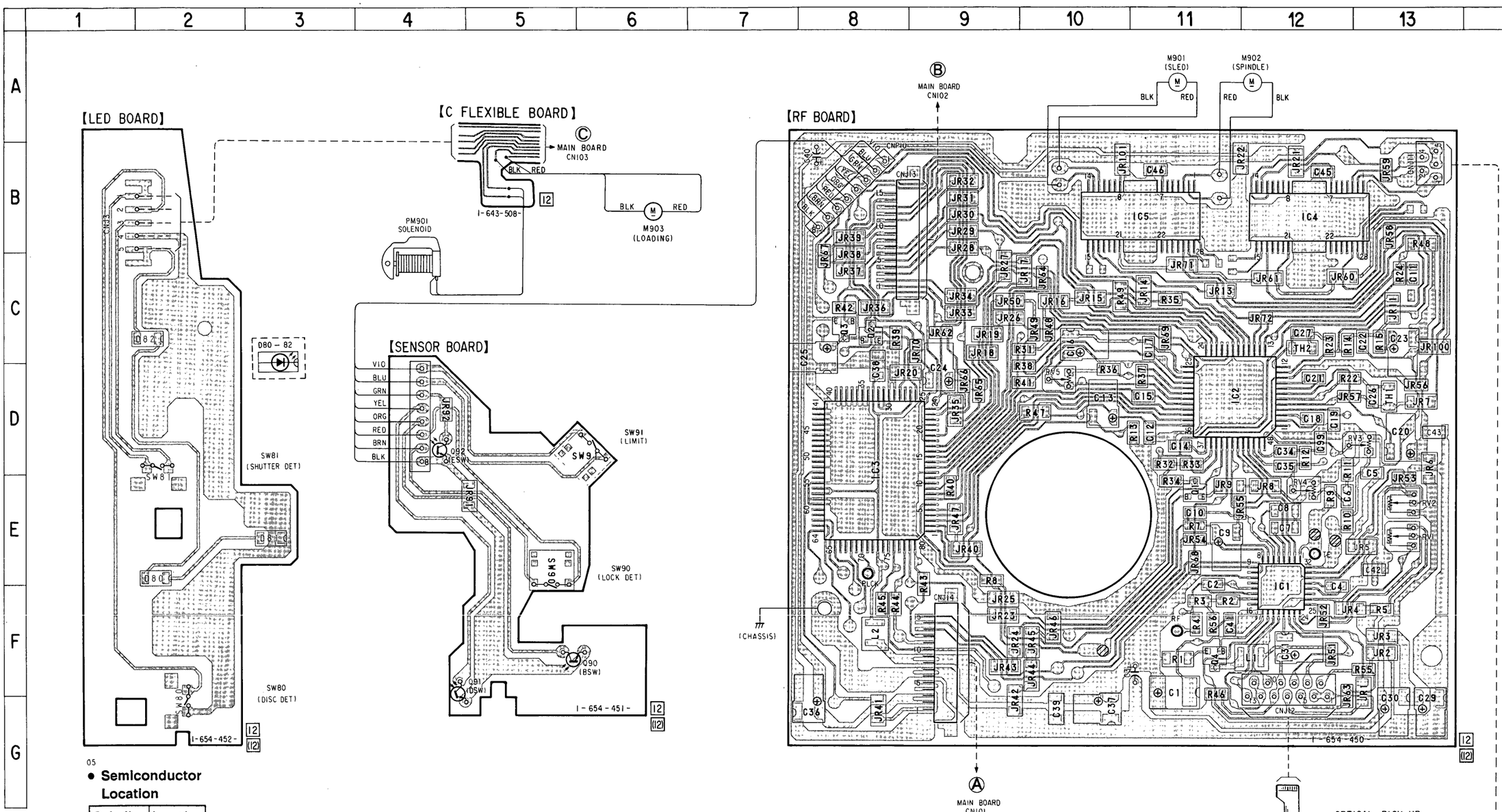
- All capacitors are in μF unless otherwise noted. pF: μμF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and ¼ W or less unless otherwise specified.

> **Note:** The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
> Replace only with part number specified.

- B + : B + Line.
- ▭ : adjustment for repair.
- Power voltage is dc 14.4 V and fed with regulated dc power supply from BATT and ACC terminal of main board CN107.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
  no mark : CD PLAY
  ＊ : Impossible to measure
- Voltages are taken with a VOM (10 MΩ/V).
  Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope.
  Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  ⇨ : CD

MECHANISM DECK SECTION PRINTED WIRING BOARDS

Page 18 to 20



05

- **Semiconductor Location**

Ref. No.	Location
D80	E-2
D81	E-3
D82	C-2
IC1	F-12
IC2	D-11
IC3	E-8
IC4	B-12
IC5	B-11
Q1	E-11
Q2	C-8
Q3	C-8
Q4	F-11
Q90	F-5
Q91	F-4
Q92	D-4

Note:

- ○——— : parts extracted from the component side.

MECHANISM DECK SECTION SCHEMATIC DIAGRAM

- See page 2 for note and waveforms.

Page 21 to 23

【RF BOARD】

OPTICAL PICK-UP KSS-320B

LASER DIODE

DETECTOR

CNJ12

TRACKING COIL

FOCUS COIL

CNJ11

C MAIN BOARD CN103

【C FLEXIBLE BOARD】

CNJ3

MD BLOCK

M903 (LOADING)

M902 (SPINDLE)

PM901 (SOLENOID)

M901 (SLED)

【LED BOARD】

SW80 (DISC) DET

SW81 (SHUTTER) DET

D81-82 LN1251C

【SENSOR BOARD】

Q91 PN-147 (DSW)

Q90 PN-147 (BSW)

Q92 PN-147 (ESW)

CNP10

SW90 (LOCK DET)

SW91 (LIMIT)

05

IC1 CXA1081Q RF AMP

IC2 CXA1082BQ SERVO PROCESSOR

IC3 CXD1167Q DIGITAL SIGNAL PROCESSOR

IC4 BA6295AFP FOCUS/TRACKING COIL DRIVE

IC5 BA6295AFP SLED/SPINDLE DRIVE

Q1 DTC114EK SWITCHING

Q2 DTC114EK SWITCHING

Q3 DTC114EK MUTING

Q4 2SB624-BV345 IOP CONT

TRACKING OFFSET

FOCUS OFFSET

FOCUS GAIN

TRACKING GAIN

PLL FREERUN

A MAIN BOARD CN101

CNJ14

B MAIN BOARD CN102

CNJ13

EXPLODED VIEWS

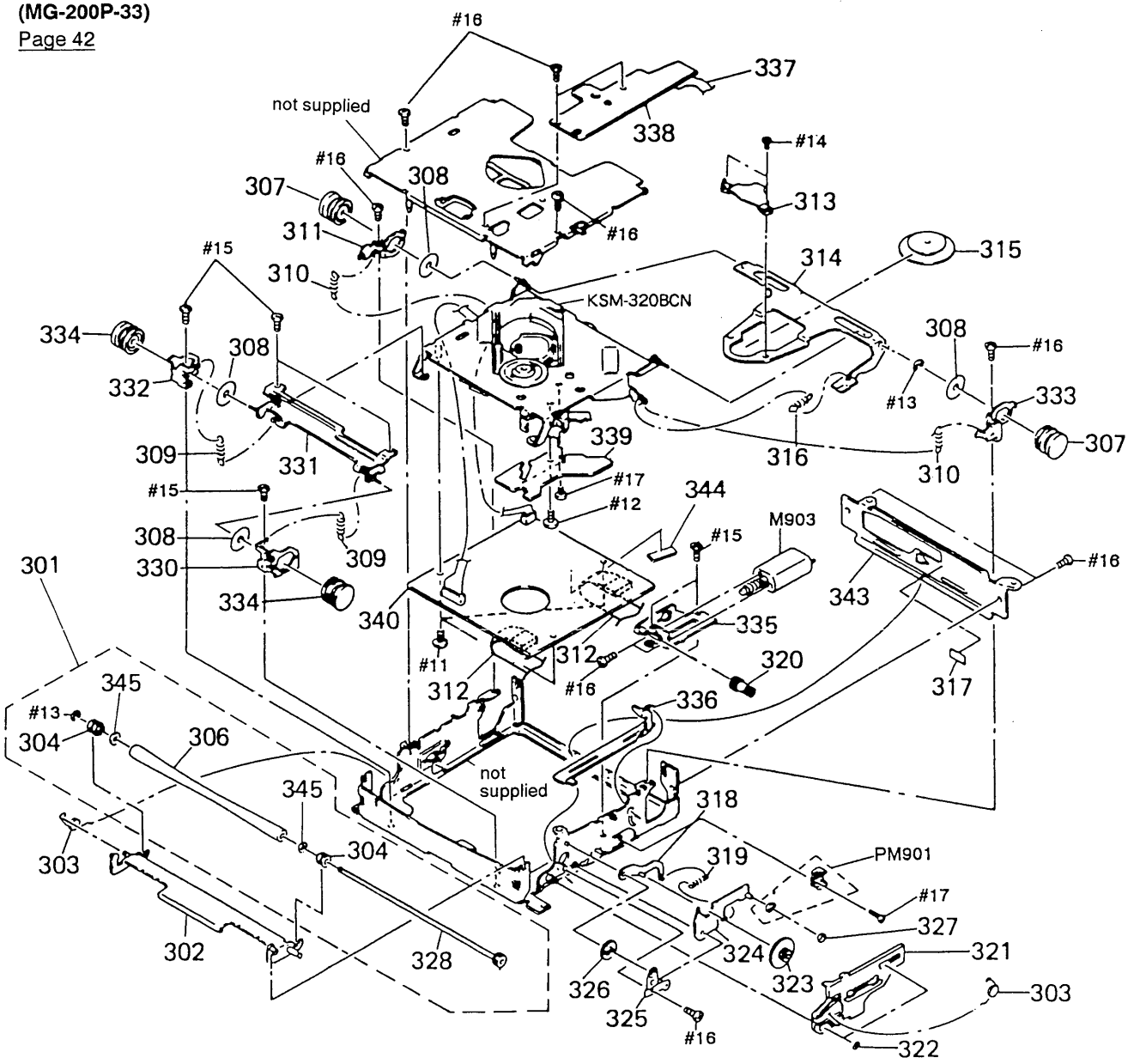
NOTE:

- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Color Indication of Appearance Parts
  Example:
  KNOB, BALANCE (WHITE) . . . (RED)
  ↑ ↑
  Parts Color Cabinet's Color
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list is given in the last of the electrical parts list.

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

MECHANISM DECK SECTION-1
(MG-200P-33)

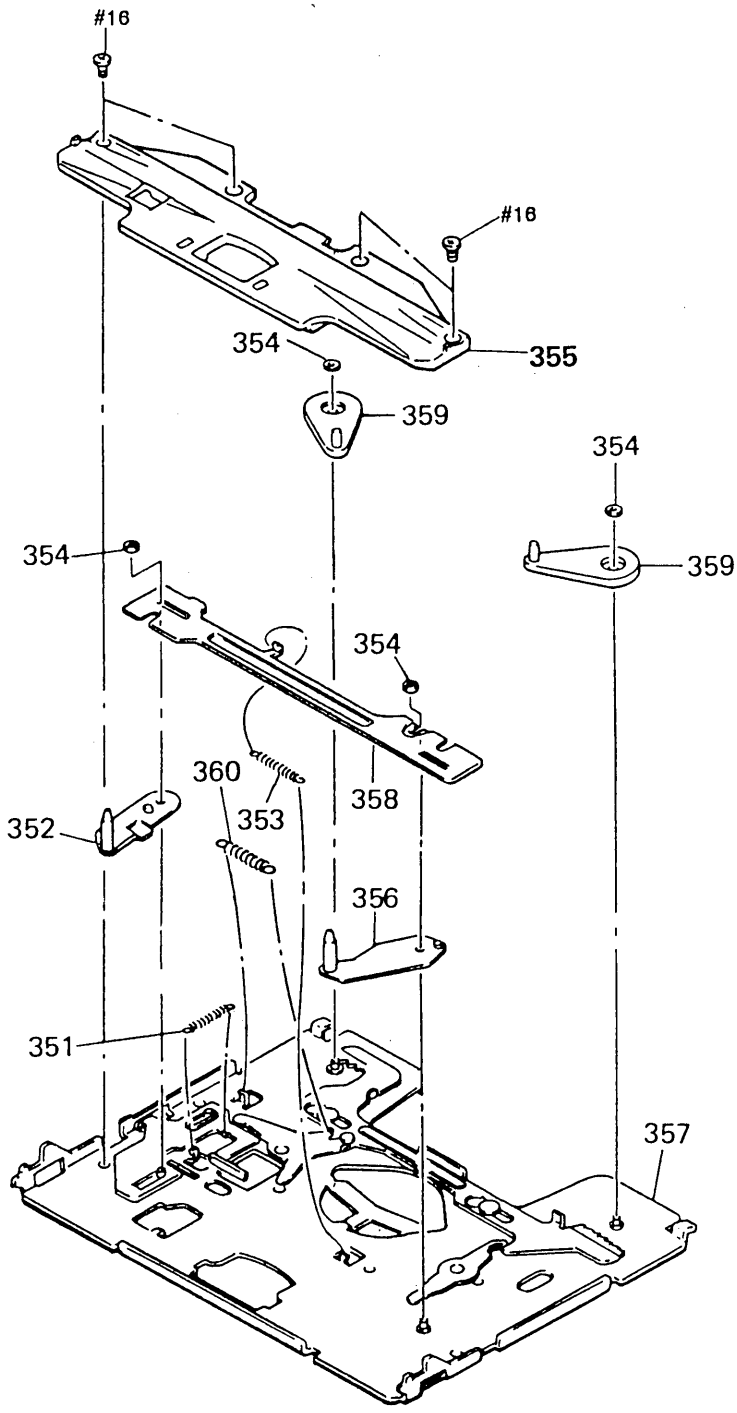
Page 42



Ref. No.	Part No.	Description	Remark
* 301	A-3252-479-A	ARM ASSY, DRIVING ROLLER	
302	X-3365-468-1	BRACKET (ROLLER) ASSY	
303	3-351-437-01	SPRING (ROLLER)	
304	3-351-416-01	BEARING (ROLLER SHAFT)	
306	3-323-231-11	ROLLER (LOWER)	
307	3-330-929-11	DAMPER (S), HYPER	
308	3-323-263-01	WASHER, TEFLON	
309	3-351-444-01	SPRING (FLOATING A, B), TENSION	
310	3-351-445-01	SPRING (FLOATING C, D), TENSION	
* 311	3-351-411-01	BRACKET (DAMPER D)	
312	1-765-682-11	CABLE, FLEXIBLE FLAT 15P	
313	3-342-625-01	RETAINER (S2), THRUST	
* 314	3-351-453-01	ARM, CHUCKING	
315	3-348-558-01	PLATE (F), CHUCK	
316	3-351-443-01	SPRING (CHUCKING), TENSION	
* 317	3-351-464-01	SHEET (SM), INSULATING	
318	X-3366-197-1	LEVER (GEAR C) ASSY	
319	3-351-463-01	SPRING (SW LEVER 2), TENSION	
320	3-351-498-01	GEAR (B, WORM WHEEL)	
321	3-351-456-11	LEVER (L.E)	
322	3-578-224-00	WASHER	

Ref. No.	Part No.	Description	Remark
323	3-351-438-01	GEAR, CAM	
* 324	X-3351-421-1	LEVER (SW) ASSY	
* 325	3-351-482-01	RETAINER (SIDE GEAR 2)	
326	3-351-414-01	GEAR (C)	
327	3-315-384-11	WASHER, STOPPER	
328	X-3351-413-1	ROLLER SHAFT ASSY	
* 330	3-351-492-01	BRACKET (DUMPER A)	
* 331	X-3351-423-1	BRACKET (F) ASSY	
* 332	3-351-493-01	BRACKET (DUMPER B)	
* 333	3-351-494-01	BRACKET (DUMPER C)	
334	3-364-310-01	DAMPER (F)	
* 335	X-3351-419-1	BRACKET (M) ASSY	
* 336	X-3351-418-1	LEVER (CH RELEASE) ASSY	
337	1-643-508-11	(C) FLEXIBLE BOARD	
* 338	1-654-452-11	LED BOARD	
* 339	1-654-451-11	SENSOR BOARD	
* 340	A-3298-367-A	RF BOARD, COMPLETE	
* 343	3-354-758-01	BRACKET (REAR N1)	
344	9-911-844-XX	SHEET	
345	3-701-438-11	WASHER, 2.5	
M903	A-3249-535-A	GEAR (A) ASSY (LOADING)	
PM901	1-454-461-11	SOLENOID, PLUNGER	

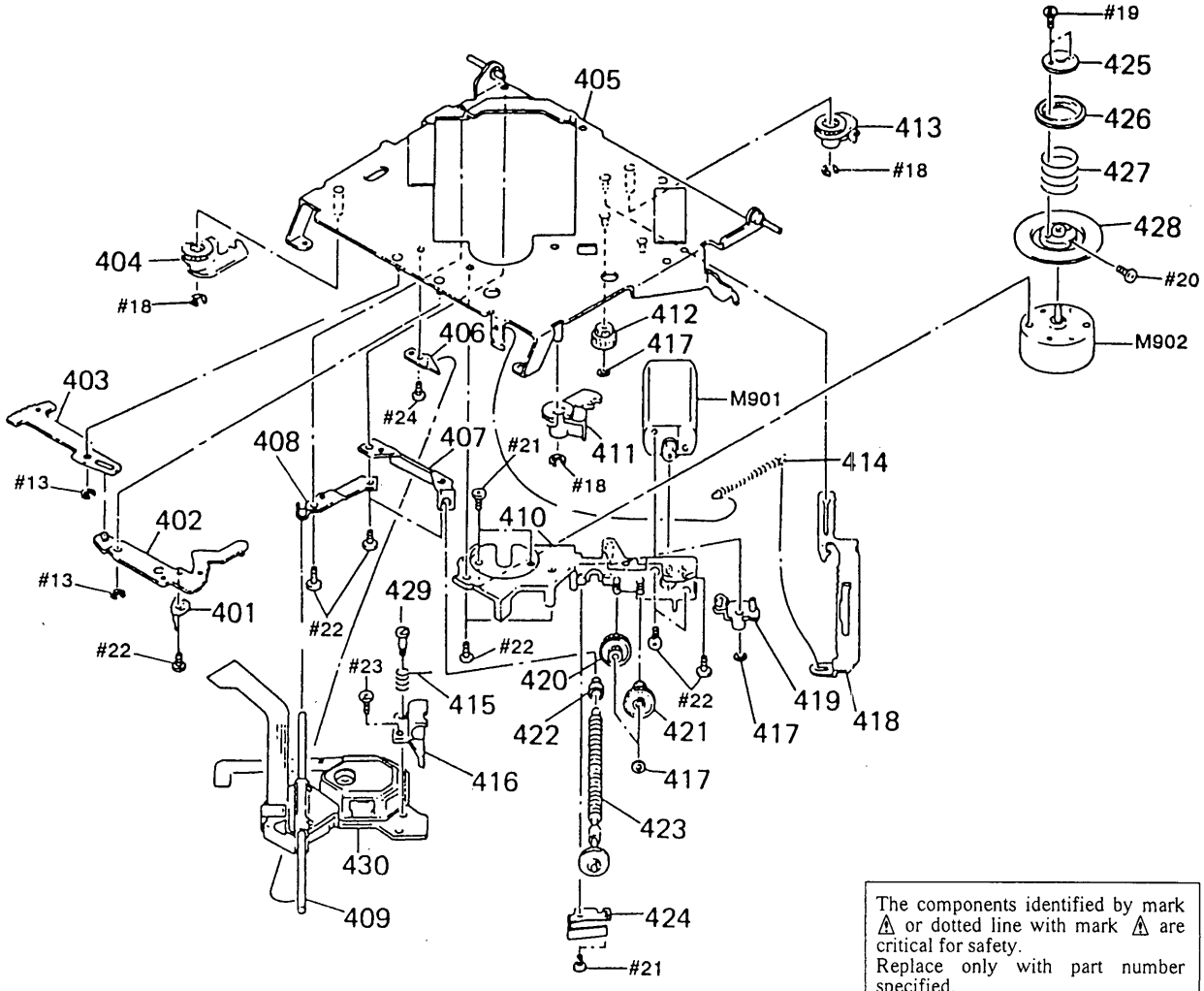
MECHANISM DECK SECTION-2
(MG-200P-33)
Page 43



Ref. No.	Part No.	Description	Remark
351	3-351-448-01	SPRING (LOCK LEVER), TENSION	
* 352	X-3351-426-1	LEVER (D DETECTION R2) ASSY	
353	3-351-447-02	SPRING (JOINT F), TENSION	
354	3-578-224-00	WASHER	
355	3-351-496-01	GUIDE (DISK 2)	

Ref. No.	Part No.	Description	Remark
* 356	X-3351-425-1	LEVER (D DETECTION L2) ASSY	
* 357	X-3351-424-1	CHASSIS (T2) ASSY	
* 358	3-351-489-02	JOINT (F2)	
359	3-351-432-01	GEAR (DS)	
360	3-351-446-01	SPRING (JOINT R), TENSION	

MECHANISM DECK SECTION-2
(MG-200P-33)
Page 43



The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Ref. No.	Part No.	Description	Remark
* 401	2-627-005-01	PLATE (N), SWITCH	
* 402	X-2641-534-2	LEVER (A) ASSY, LOCK	
* 403	2-641-582-01	LEVER (B), LOCK	
* 404	2-643-414-05	GEAR (B), LOCK	
* 405	X-2625-446-1	CHASSIS ASSY (F), MAIN	
* 406	2-643-402-01	RETAINER (B), SHAFT	
* 407	2-643-403-02	RETAINER, FEED SCREW	
* 408	2-264-401-01	RETAINER (A), SHAFT	
* 409	2-640-632-02	SHAFT, GUIDE	
* 410	X-2641-535-4	CHASSIS ASSY, LOCK	
* 411	2-643-413-06	GEAR (A), LOCK	
* 412	2-643-405-02	WHEEL, WORM	
* 413	2-641-599-05	GEAR (C), GEAR	
* 414	2-641-595-04	SPRING, TENSION	
* 415	2-643-420-04	SPRING	
* 416	2-627-006-01	NUT (N), FEED	
* 417	3-321-813-01	WASHER, COTTER POLYETHYLENE	
* 418	X-2641-546-4	LEVER (C) ASSY, LOCK	
* 419	2-643-406-04	LEVER, SELECTION	
* 420	2-643-410-03	GEAR (E)	
* 421	2-643-409-03	GEAR (D)	
422	2-643-408-02	RETAINER, THRUST	
423	A-4910-184-E	SCREW ASSY, FEED	
* 424	2-643-404-02	SPRING	
* 425	2-640-650-02	STOPPER, RING	
* 426	2-643-418-05	RING, CENTER	
* 427	2-640-617-02	SPRING, COMPRESSION	
428	X-2641-545-3	TURNTABLE ASSY (A)	
429	2-643-423-11	SCREW, SP	
⚠430	8-848-224-11	OPTICAL PICK-UP (KSS-320B)	
M901	A-4910-183-A	MOTOR ASSY, SLED	
M902	1-541-448-41	MOTOR (SPINDLE)	

ELECTRICAL PARTS LIST Page 45, 50, 51, 52

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms.
  METAL:Metal-film resistor.
  METAL OXIDE: Metal oxide-film resistor.
  F:nonflammable
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u:μ, for example:
  uA..: μA.. uPA..: μPA..
  uPB..: μPB.. uPC..: μPC.. uPD..: μPD..
- CAPACITORS
  uF: μF
- COILS
  uH: μH

The components identified by mark ⚠ or dotted line with mark. ⚠ are critical for safety. Replace only with part number specified.

When indicating parts by reference number, please include the board.

Ref. No.	Part No.	Description			Remark
*	1-654-452-11	LED BOARD			
		*********			
	1-643-508-11	(C) FLEXIBLE BOARD			
*	3-355-252-01	SHEET (MD), INSULATING			
		< DIODE >			
D80	8-719-404-19	DIODE LN1251C			
D81	8-719-404-19	DIODE LN1251C			
D82	8-719-404-19	DIODE LN1251C			
		< SWITCH >			
SW80	1-571-754-11	SWITCH, PUSH (1 KEY) (DISC DET)			
SW81	1-571-754-11	SWITCH, PUSH (1 KEY) (SHUTTER DET)			
**********					
*	A-3298-367-A	RF BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C1	1-135-166-21	TANTALUM CHIP	47uF	10%	10V
C2	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V
C3	1-126-599-11	ELECT	330uF	20%	6.3V
C4	1-163-989-11	CERAMIC CHIP	0.033uF	10%	25V
C5	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C6	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C7	1-163-078-11	CERAMIC CHIP	0.033uF	10%	25V
C8	1-163-059-00	CERAMIC CHIP	0.01uF	10%	50V
C9	1-110-469-11	ELECT CHIP	0.47uF	20%	50V
C10	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C11	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C12	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C13	1-110-469-11	ELECT CHIP	0.47uF	20%	50V
C14	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C15	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C16	1-110-442-11	ELECT CHIP	22uF	20%	4V
C17	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V
C18	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C19	1-163-989-11	CERAMIC CHIP	0.033uF	10%	25V
C20	1-110-453-11	ELECT CHIP	4.7uF	20%	16V
C21	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C22	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C23	1-110-446-11	ELECT CHIP	10uF	20%	6.3V
C24	1-110-470-11	ELECT CHIP	1.0uF	20%	50V
C25	1-110-470-11	ELECT CHIP	1.0uF	20%	50V
C26	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C27	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C29	1-110-442-11	ELECT CHIP	22uF	20%	4V
C30	1-110-442-11	ELECT CHIP	22uF	20%	4V
C31	1-110-442-11	ELECT CHIP	22uF	20%	4V
C34	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C35	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V
C36	1-110-453-11	ELECT CHIP	4.7uF	20%	16V
C37	1-110-446-11	ELECT CHIP	10uF	20%	6.3V
C38	1-162-638-11	CERAMIC CHIP	1uF		16V
C39	1-162-638-11	CERAMIC CHIP	1uF		16V
C40	1-126-176-11	ELECT	220uF	20%	10V
C41	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C42	1-162-638-11	CERAMIC CHIP	1uF		16V
C43	1-162-638-11	CERAMIC CHIP	1uF		16V
C45	1-164-346-11	CERAMIC CHIP	1uF		16V
C46	1-164-346-11	CERAMIC CHIP	1uF		16V
C99	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
		< CONNECTOR >			
CNJ11	1-568-141-11	HOUSING, CONNECTOR 5P			
CNJ12	1-568-142-11	HOUSING, CONNECTOR 13P			
CNJ13	1-566-531-11	CONNECTOR, FPC (ZIF) 15P			
CNJ14	1-566-531-11	CONNECTOR, FPC (ZIF) 15P			
* CNP10	1-506-990-11	PIN, CONNECTOR (PC BOARD) 8P			
		< IC >			
IC1	8-752-033-14	IC CXA1081Q			
IC2	8-752-057-45	IC CXA1082BQ			
IC3	8-752-341-93	IC CXD1167Q			
IC4	8-759-088-60	IC BA6295AFP			
IC5	8-759-088-60	IC BA6295AFP			

RF

Ref. No.	Part No.	Description			Remark
		< JUMPER RESISTOR >			
JR1	1-216-296-00	METAL CHIP	0	5%	1/8W
JR2	1-216-296-00	METAL CHIP	0	5%	1/8W
JR3	1-216-296-00	METAL CHIP	0	5%	1/8W
JR4	1-216-296-00	METAL CHIP	0	5%	1/8W
JR5	1-216-296-00	METAL CHIP	0	5%	1/8W
JR6	1-216-296-00	METAL CHIP	0	5%	1/8W
JR7	1-216-296-00	METAL CHIP	0	5%	1/8W
JR8	1-216-296-00	METAL CHIP	0	5%	1/8W
JR9	1-216-296-00	METAL CHIP	0	5%	1/8W
JR11	1-216-296-00	METAL CHIP	0	5%	1/8W
JR13	1-216-296-00	METAL CHIP	0	5%	1/8W
JR14	1-216-296-00	METAL CHIP	0	5%	1/8W
JR15	1-216-296-00	METAL CHIP	0	5%	1/8W
JR16	1-216-296-00	METAL CHIP	0	5%	1/8W
JR17	1-216-296-00	METAL CHIP	0	5%	1/8W
JR18	1-216-296-00	METAL CHIP	0	5%	1/8W
JR19	1-216-296-00	METAL CHIP	0	5%	1/8W
JR20	1-216-296-00	METAL CHIP	0	5%	1/8W
JR21	1-216-296-00	METAL CHIP	0	5%	1/8W
JR22	1-216-296-00	METAL CHIP	0	5%	1/8W
JR23	1-216-296-00	METAL CHIP	0	5%	1/8W
JR24	1-216-296-00	METAL CHIP	0	5%	1/8W
JR25	1-216-296-00	METAL CHIP	0	5%	1/8W
JR26	1-216-296-00	METAL CHIP	0	5%	1/8W
JR27	1-216-296-00	METAL CHIP	0	5%	1/8W
JR28	1-216-296-00	METAL CHIP	0	5%	1/8W
JR29	1-216-296-00	METAL CHIP	0	5%	1/8W
JR30	1-216-296-00	METAL CHIP	0	5%	1/8W
JR31	1-216-296-00	METAL CHIP	0	5%	1/8W
JR32	1-216-296-00	METAL CHIP	0	5%	1/8W
JR33	1-216-296-00	METAL CHIP	0	5%	1/8W
JR34	1-216-296-00	METAL CHIP	0	5%	1/8W
JR35	1-216-296-00	METAL CHIP	0	5%	1/8W
JR36	1-216-296-00	METAL CHIP	0	5%	1/8W
JR37	1-216-296-00	METAL CHIP	0	5%	1/8W
JR38	1-216-296-00	METAL CHIP	0	5%	1/8W
JR39	1-216-296-00	METAL CHIP	0	5%	1/8W
JR40	1-216-296-00	METAL CHIP	0	5%	1/8W
JR41	1-216-296-00	METAL CHIP	0	5%	1/8W
JR42	1-216-296-00	METAL CHIP	0	5%	1/8W
JR43	1-216-296-00	METAL CHIP	0	5%	1/8W
JR44	1-216-296-00	METAL CHIP	0	5%	1/8W
JR45	1-216-296-00	METAL CHIP	0	5%	1/8W
JR46	1-216-296-00	METAL CHIP	0	5%	1/8W
JR47	1-216-296-00	METAL CHIP	0	5%	1/8W
JR48	1-216-295-00	METAL CHIP	0	5%	1/10W
JR49	1-216-295-00	METAL CHIP	0	5%	1/10W
JR50	1-216-296-00	METAL CHIP	0	5%	1/8W
JR51	1-216-295-00	METAL CHIP	0	5%	1/10W
JR52	1-216-295-00	METAL CHIP	0	5%	1/10W
JR53	1-216-295-00	METAL CHIP	0	5%	1/10W
JR54	1-216-295-00	METAL CHIP	0	5%	1/10W
JR55	1-216-295-00	METAL CHIP	0	5%	1/10W
JR56	1-216-295-00	METAL CHIP	0	5%	1/10W
JR57	1-216-295-00	METAL CHIP	0	5%	1/10W
JR58	1-216-295-00	METAL CHIP	0	5%	1/10W
JR59	1-216-295-00	METAL CHIP	0	5%	1/10W
JR60	1-216-296-00	METAL CHIP	0	5%	1/8W
JR61	1-216-296-00	METAL CHIP	0	5%	1/8W
JR62	1-216-295-00	METAL CHIP	0	5%	1/10W
JR63	1-216-295-00	METAL CHIP	0	5%	1/10W
JR64	1-216-295-00	METAL CHIP	0	5%	1/10W
JR65	1-216-295-00	METAL CHIP	0	5%	1/10W
JR66	1-216-295-00	METAL CHIP	0	5%	1/10W
JR67	1-216-295-00	METAL CHIP	0	5%	1/10W
JR68	1-216-295-00	METAL CHIP	0	5%	1/10W
JR69	1-216-295-00	METAL CHIP	0	5%	1/10W
JR70	1-216-295-00	METAL CHIP	0	5%	1/10W
JR71	1-216-296-00	METAL CHIP	0	5%	1/8W
JR72	1-216-295-00	METAL CHIP	0	5%	1/10W
JR100	1-216-296-00	METAL CHIP	0	5%	1/8W
JR101	1-216-296-00	METAL CHIP	0	5%	1/8W
		< COIL >			
L1	1-410-381-11	INDUCTOR CHIP	10uH		
L2	1-410-375-11	INDUCTOR CHIP	3.3uH		
		< TRANSISTOR >			
Q1	8-729-900-53	TRANSISTOR	DTC114EK		
Q2	8-729-900-53	TRANSISTOR	DTC114EK		
Q3	8-729-900-53	TRANSISTOR	DTC114EK		
Q4	8-729-141-48	TRANSISTOR	2SB624-BV345		
		< RESISTOR >			
R1	1-216-150-00	METAL CHIP	10	5%	1/8W
R2	1-216-071-00	METAL CHIP	8.2K	5%	1/10W
R3	1-216-077-00	METAL CHIP	15K	5%	1/10W
R4	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R5	1-216-081-00	METAL CHIP	22K	5%	1/10W
R7	1-216-097-00	METAL CHIP	100K	5%	1/10W
R8	1-216-073-00	METAL CHIP	10K	5%	1/10W
R9	1-216-073-00	METAL CHIP	10K	5%	1/10W
R10	1-216-073-00	METAL CHIP	10K	5%	1/10W
R11	1-216-061-00	METAL CHIP	3.3K	5%	1/10W

Ref. No.	Part No.	Description			Remark
R12	1-216-105-00	METAL CHIP	220K	5%	1/10W
R13	1-216-121-00	METAL CHIP	1M	5%	1/10W
R14	1-216-105-00	METAL CHIP	220K	5%	1/10W
R15	1-216-085-00	METAL CHIP	33K	5%	1/10W
R22	1-216-097-00	METAL CHIP	100K	5%	1/10W
R23	1-216-097-00	METAL CHIP	100K	5%	1/10W
R24	1-216-103-00	METAL CHIP	180K	5%	1/10W
R31	1-216-097-00	METAL CHIP	100K	5%	1/10W
R32	1-216-076-00	METAL CHIP	13K	5%	1/10W
R33	1-216-076-00	METAL CHIP	13K	5%	1/10W
R34	1-216-059-00	METAL CHIP	2.7K	5%	1/10W
R35	1-216-114-00	METAL CHIP	510K	5%	1/10W
R36	1-216-059-00	METAL CHIP	2.7K	5%	1/10W
R37	1-216-103-00	METAL CHIP	180K	5%	1/10W
R38	1-216-097-00	METAL CHIP	100K	5%	1/10W
R39	1-216-097-00	METAL CHIP	100K	5%	1/10W
R40	1-216-097-00	METAL CHIP	100K	5%	1/10W
R41	1-216-073-00	METAL CHIP	10K	5%	1/10W
R42	1-216-073-00	METAL CHIP	10K	5%	1/10W
R43	1-216-041-00	METAL CHIP	470	5%	1/10W
R44	1-216-041-00	METAL CHIP	470	5%	1/10W
R45	1-216-041-00	METAL CHIP	470	5%	1/10W
R46	1-216-049-00	METAL CHIP	1K	5%	1/10W
R47	1-216-229-00	METAL CHIP	20K	5%	1/8W
R48	1-216-214-00	METAL CHIP	4.7K	5%	1/8W
R49	1-216-246-00	METAL CHIP	100K	5%	1/8W
R55	1-216-024-00	METAL CHIP	91	5%	1/10W
R56	1-216-067-00	METAL CHIP	5.6K	5%	1/10W
		< VARIABLE RESISTOR >			
RV1	1-237-119-11	RES, ADJ, METAL GLAZE	22K		
RV2	1-238-206-11	RES, ADJ, METAL GLAZE	47K		
RV3	1-238-665-21	RES, ADJ, CERMET	22K		
RV4	1-238-665-21	RES, ADJ, CERMET	22K		
RV5	1-238-662-11	RES, ADJ, CERMET	2.2K		
		< THERMISTOR >			
TH1	1-808-656-11	THERMISTOR			
TH2	1-808-656-11	THERMISTOR			
*	1-654-451-11	SENSOR BOARD			
		< JUMPER RESISTOR >			
JR91	1-216-296-00	METAL CHIP	0	5%	1/8W
JR92	1-216-295-00	METAL CHIP	0	5%	1/10W

Ref. No.	Part No.	Description	Remark
		< TRANSISTOR >	
Q90	8-729-017-82	TRANSISTOR PN147-LP-R	
Q91	8-729-017-82	TRANSISTOR PN147-LP-R	
Q92	8-729-017-82	TRANSISTOR PN147-LP-R	
		< SWITCH >	
SW90	1-572-467-61	SWITCH, PUSH (1 KEY) (LOCK DET)	
SW91	1-572-467-61	SWITCH, PUSH (1 KEY) (LIMIT SW)	
		MISCELLANEOUS	
312	1-765-682-11	CABLE, FLEXIBLE FLAT 15P	
⚠430	8-848-224-11	OPTICAL PICK-UP (KSS-320B)	
M901	A-4910-183-A	MOTOR ASSY, SLED	
M902	1-541-448-41	MOTOR (SPINDLE)	
M903	A-3249-535-A	GEAR (A) ASSY (LOADING)	
PM901	1-454-461-11	SOLENOID, PLUNGER	

HARDWARE LIST

#11	7-621-771-06	SCREW +B 2X5
#12	7-621-255-15	SCREW +B 2X3
#13	7-624-104-04	STOP RING 2.0, TYPE -E
#14	7-627-552-18	SCREW, PRECISION +P 1.7X1.6
#15	7-627-553-28	SCREW, PRECISION +P 2X2.5
#16	7-627-553-37	SCREW, PRECISION +P 2X3
#17	7-627-850-57	SCREW, PRECISION +P 1.4X3.5
#18	7-624-106-04	STOP RING 3.0, TYPE-E
#19	7-627-451-17	SCREW, PRECISION +K 1.4X2.5
#20	7-627-451-57	SCREW, PRECISION +K 1.4X4
#21	7-627-552-08	SCREW, PRECISION +P 1.7X2.5
#22	7-627-554-18	SCREW, PRECISION +P 2X3.5 TYPE 1
#23	7-627-852-17	+P 1.7X4
#24	7-627-553-17	SCREW, PRECISION +P 2X2 TYPE 3

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

English
95E05016-1
Printed in Japan
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9-956-902-82

Sony Corporation
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Published by Home A&V Products Div.
Quality Engineering Dept.

CDX-5N15W

SONY
SERVICE MANUAL

US Model

CORRECTION-1

Correct your service manual as shown below.

☛ : **indicates corrected portion.**

Page	INCORRECT			CORRECT	
	No.	Part No.	Description	Part No.	Description
41	51	9-902-370-01	KEY BOARD ASSY	9-902-545-01	CASE ASSY

9-956-902-91

Sony Corporation
Mobile Electronics Group

English
93B06023-1
Printed in Japan
© 1993.2
Published by Audio Corporate Planning Group

CDX-5N15W

SONY

SERVICE MANUAL

US Model

CORRECTION-2

Correct your service manual as shown below.

☛ : indicates corrected portion.

Page	INCORRECT			CORRECT		
	No.	Part No.	Description	No.	Part No.	Description
41	53	9-900-491-01	SWITCH, TACT (RPT)	53	9-900-484-01 ☛	BUTTON (RPT) ☛
	54	9-900-491-01	SWITCH, TACT (APS)	54	9-900-485-01 ☛	BUTTON (APS) ☛
	55	9-900-491-01	SWITCH, TACT (◀◀)	54	9-900-487-01 ☛	BUTTON (◀◀) ☛
	56	9-900-491-01	SWITCH, TACT (PLAY/STOP)	54	9-900-483-01 ☛	BUTTON (PLAY/STOP) ☛
	57	9-900-491-01	SWITCH, TACT (⏏)	54	9-900-482-01 ☛	BUTTON (⏏) ☛
	58	9-900-491-01	SWITCH, TACT (▶▶)	54	9-900-486-01 ☛	BUTTON (▶▶) ☛

(RPC-96016)

9-956-902-92

Sony Corporation
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English
96J04016-1D
Printed in Japan
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Published by Quality Assurance Dept.